

TREASUFE ROOM


# BULLETIN <br> OF <br> Duke University 

## SCHOOL OF MEDICINE



1930-1931

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UNDER ACT OF AUGUST 24, 1912

# BULLETIN <br> OF <br> Duke University 

SCHOOL OF MEDICINE



1930-1931

DURHAM, NORTH CAROLINA

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## SCHOOL OF MEDICINE CALENDAR, 1930-1931

1930
July 1 (Tuesday), Duke Hospital and Out-Patient Clinic open.
October 1 (Wednesday), Final registration for autumn quarter.
October 2 (Thursday), Autumn quarter begins.
November 26 (Wednesday), Thanksgiving vacation begins.
December 1 (Monday), Instruction is resumed.
December 20 (Saturday), Autumn quarter ends and Christmas vacation begins.

1931
January 2 (Friday), Winter quarter begins.
March 21 (Saturday), Winter quarter ends and spring vacation begins.
March 30 (Monday), Spring quarter begins.
June 13 (Saturday), Spring quarter ends and June vacation begins.
June 22 (Monday), Summer quarter begins.
September 5 (Saturday), Summer quarter ends and September vacation begins.
October 1 (Thursday), Autumn quarter begins.
November 25 (Wednesday), Thanksgiving vacation begins.
November 30 (Monday), Instruction is resumed.
December 19 (Saturday), Autumn quarter ends and Christmas vacation begins.

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(Additional appointments will be made later)

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## GENERAL STATEMENT

The Duke University School of Medicine and the Duke Hospital were established in 1925 through the munificent gift of the late James B. Duke. The hospital and out-patient clinic will be open for patients on July 1, 1930, and carefully selected first and third year students will be admitted to the School of Medicine on October 1, 1930. Women will be received on the same terms as men.

In establishing the sixth medical school in North Carolina, Duke University has an unparalleled opportunity to aid in the solution of five of the greatest present medical problems, namely, (1) the inability of most medical students to obtain adequate interne hospital training because of the average age of twenty-six years at which they are graduated from medical school; (2) the lack of provision for intensive and extensive postgraduate education for physicians who have been in practice for several years; (3) the disproportion in the distribution of doctors in the cities and rural areas ; (4) the dearth of university training for nurses and (5) the need of people of moderate means for diagnostic facilities and hospital treatment within their ability to pay.

The School of Medicine with laboratories and class rooms for three hundred students has been planned to insure the greatest correlation between the various departments.

The Hospital with its four hundred beds will have every modern convenience for the diagnosis, proper care, welfare and comfort of the patients, both private and charity, white and colored, whether they come from Durham or from a distance. The primary function of the hospital will be to provide the best of medical and nursing care. The arrangement and equipment of the out-patient clinic will furnish complete diagnostic facilities. In order to coöperate with the medical profession and to insure the best interests of the patients, it is highly desirable for those who contemplate coming to the hospital or out-patient clinic to consult and bring a letter from their own physicians. After discharge from the hospital, patients will be asked to return to their own physicians. In addition to the clinical facilities of the Duke Hospital and Out-Patient Clinic, the Trus-
tees of the Watts Hospital ( 220 beds) and of the Lincoln Hospital ( 108 beds) have very kindly granted teaching privileges to the Duke University School of Medicine.

## HOSPITAL

If a patient is recommended for admission to the hospital by his own physician and the admitting office, he may have a ward bed at $\$ 3.00$ per day (see last paragraph under OutPatient Clinic), or he may have a semi-private room at $\$ 4.00$ per day or a private room at $\$ 5.00$ to $\$ 9.00$ per day. No extra charge is made for the usual treatments, drugs and routine laboratory examinations but there is a charge for X-rays, operating room and special examinations and treatments. A deposit must be made in advance to cover the estimated hospital charges. Patients in semi-private and private rooms pay their own physician or surgeon for professional services. Those who are certified by their county welfare officers as unable to pay the ward rate of $\$ 3.00$ per day will be charged a reduced rate or will be treated free if hospital care is judged to be necessary by the hospital admitting office.

## OUT-PATIENT CLINIC

Daily, except Sundays and holidays, from 1:30 to $3: 00 \mathrm{p} . \mathrm{m}$., white patients will be admitted to the out-patient clinic (see last paragraph) for diagnosis and treatment in: General medicine, dermatology, roentgenology, physiotherapy, neurology, psychiatry, general surgery, urology, oto-laryngology, ophthalmology, orthopedics, dentistry, obstetrics, gynecology and pediatrics. A charge of $\$ 2.00$ toward the cost of service will be made for each visit, if the patient is able to pay; however, those accompanied by their own physicians will be admitted free. An extra charge will be made for the cost of X-rays, and special diagnostic procedures and treatments. Those who are certified by their county welfare officers as unable to pay the regular fees will be charged a reduced rate or will be treated free.

Daily, except Sundays and holidays, from $3: 30$ to $5: 00$ p. m., the out-patient clinic will provide a similar service for colored patients.

All patients in the out-patient clinic will be seen by appointment except in case of emergency. Emergency patients will be seen at any time. In order to coöperate with the medical profession, anyone who wishes to attend the clinic should consult his own physician and if the latter recommends an appointment at the clinic, it should be arranged by telephoning the clinic office (F-133), or by writing to the Admitting Office, Duke Hospital, Durham, N. C. If no advance appointment is made by telephone or by letter, a wait at the clinic office may be unavoidable. A cordial invitation is extended to physicians to accompany their patients.

The general policy of admitting patients to the wards and out-patient clinic will be to consider their financial and social status carefully; income and size of family, special responsibilities and the probable cost of treatment all being weighed in determining admission. A married patient, for instance, with an income of less than $\$ 25$ per week will be considered admissible to the wards or out-patient clinic for ordinary conditions; the income limit, of course, varying according to the other factors which affect the patient's ability to pay. Those who are able to pay the ordinary fees of consultants and specialists will not be admitted to the out-patient clinic but may make arrangements through their own physicians for private appointments.

## PATIENTS

"Where will the patients for the Duke Hospital and School of Medicine come from?" is a frequent question. Many believe that a teaching hospital must be situated in a huge metropolis. However, in 1913, Osler pointed out that a large population was not essential for a medical school and that Marburg, in Germany, with twenty-three thousand people-half the size of Durham-maintained a medical school of the first rank. The populations of Jena and Heidelberg are very similar to that of Durham and they certainly have no dearth of patients. This statement of Osler's is even more true today because of the tremendous increase in the number of automobiles. For medical schools in large cities, automobiles, by increasing the traffic congestion, actually have reduced the amount of territory from
which patients may attend clinics. For instance, in New York and Chicago nearly an hour is required to go from the center of the city to the medical schools. On the other hand, with the splendid roads in North Carolina, patients can be brought long distances by automobiles in the same time and with more comfort and safety than is possible in traversing a large city. In addition to serving the 47,000 people of Durham, the staff, buildings and equipment should attract a number of patients from among the half million people who live within a fifty mile radius of Durham, as well as from more distant areas.

## SCHOOL OF NURSING

The establishment of a University School of Nursing through the coöperation of the University, School of Medicine and Hospital will meet a great need; it will raise the standard of nursing by the selection of pupil nurses upon the same basis as that of the women students of Duke University, by the provision for them of the same housing, recreational and educational advantages upon the campus of the Co-ordinate College for Women, by the use of ward maids to reduce the laborious part of nursing training so that the professional care of patients can be increased during the three years of the basic nursing curriculum which leads to the Diploma of Graduate Nurse, and by the giving of postgraduate instruction to nurses who have been trained elsewhere.

The first class of the Duke University School of Nursing will be admitted on January 2, 1931. The entrance requirements will be intelligence, character and graduation from an acceptable high school. The course leading to the Diploma of Graduate Nurse will consist of three years of eleven months each. The tuition will be $\$ 100$ per year. Application forms may be obtained by writing to the Dean, Duke University School of Nursing, Durham, N. C.

Duke University will grant the degree of Bachelor of Science to women who have completed successfully two years of college work ( 60 semester hours) in Duke University or an acceptable college or university in addition to the three year course leading to the Diploma of Graduate Nurse in the Duke University School of Nursing. The sixty semester hours of college work
can be completed either before or after the three year course in the School of Nursing, but not during it.

## SCHOOL OF DIETETICS

In addition to the training of medical students and nurses in dietetics, women whose previous training is acceptable will be admitted to the School of Dietetics and will be given a Certificate of Graduate Dietitian after the successful completion of the course of one year. Applications should be sent to the Professor of Dietetics, Duke University School of Dietetics, Durham, N. C.

## POSTGRADUATE STUDY

The need for more provision for postgraduate study is very acute not only in this country but abroad. There are very few clinics to which a physician can go, after he has been in practice several years, to obtain the additional training which he has found he requires. It is the plan of the School of Medicine to attempt to fill this need. If any doctor wishes to spend a few days, weeks or months reviewing his knowledge of medicine, surgery, obstetrics, pediatrics or other branches, or if he has to do an unusual operation and wishes to refresh his memory of the anatomy involved, the facilities and equipment will be at his disposal. The service of the School of Medicine will not be limited to the training of its own students and staff but will extend to giving the members of the medical profession the benefit of everything it has. Graduates in medicine will be especially welcomed at the varied clinics and demonstrations in medicine, surgery, obstetrics, pediatrics and other specialties which will be held from $9 \mathrm{a} . \mathrm{m}$. to $1 \mathrm{p} . \mathrm{m}$. each Saturday. Training in preventive medicine and public health, not only for the students in the School of Medicine, but also special work for those who wish to enter upon careers as health officers will be provided. Further information may be obtained by writing to the head of the department concerned or to the Dean, Duke University School of Medicine, Durham, N. C.

## INTERNESHIPS AND RESIDENCIES

Interneships of one year's duration with room, board, laundry and uniforms furnished, but without salary, are available in medicine (including dermatology, roentgenology, neurology, psychiatry, obstetrics, gynecology, and pediatrics), in surgery (including urology, oto-laryngology, ophthalmology, orthopedics, obstetrics and gynecology), or in pathology, commencing each January, April, July and October. Medical and surgical internes may elect any of the branches of medicine or surgery which they prefer as a major and six months of the total may be spent in that field; the remaining time will be divided among the other medical or surgical divisions. Internes in pathology will spend the full twelve months in that department. Application blanks, which must be returned at least three months before the appointment is desired, may be obtained by writing to the head of the department in which an interneship is wanted, Duke University School of Medicine, Durham, N. C. Graduates of any class A medical school are eligible for interneships.

After the completion of an interneship in the Duke Hospital or in an acceptable hospital, a certain number may be appointed as assistant residents in medicine, surgery, obstetrics, gynecology, pediatrics, pathology, biochemistry, or in any one of the medical or surgical specialties, at a salary of $\$ 250$ to $\$ 500$ per year, with maintenance, and eventually may be promoted to the residency in the various departments or sub-departments of the hospital at an annual salary of $\$ 500$ to $\$ 1,000$, with maintenance. Applications should be made to the head of the department concerned.

## LIBRARY

"To study the phenomena of disease without books is to sail an uncharted sea, while to study books without patients is not to go to sea at all.-Sir William Osler

In addition to the general library of Duke University, which has 200,000 volumes, the Duke Hospital Library contains 20,000 volumes of American and foreign medical literature. The hospital library subscribes to 300 current American and foreign medical and other scientific journals. These books and journals are available daily from $9: 00 \mathrm{a} . \mathrm{m}$. to $9: 00 \mathrm{p} . \mathrm{m}$. for the students, nurses, staff and medical profession.

## APPLICATION FOR ADMISSION

Application forms may be obtained by writing to the Dean, Duke University School of Medicine, Durham, N. C. They must be filled in with typewriting, a $2 \mathrm{in} . \times 21 / 2 \mathrm{in}$. recent photograph attached and the application returned to the dean as soon as possible. Applications will be evaluated in the order received. If the information obtained is satisfactory, a personal interview with the dean or regional representative of the committee on admission will be arranged for the applicant. The applicant will then be notified as soon as possible whether he has been accepted or declined; if accepted, the student must send a deposit of $\$ 50$ within two weeks to insure his enrollment. This money will be applied toward the tuition. First year students will be admitted only in October at the beginning of the autumn quarter, but applications will be considered and a decision in regard to admission will be made at any time during the preceding year.

## REQUIREMENTS FOR ENTRANCE

"I recommend that great care and discrimination be exercised in admitting as students only those whose previous record shows a character, determination and application evincing a wholesome and real ambition for life."-James B. Duke.

Intelligence and character, plus two years of college work (70 semester hours), including:

Biology: At least one year of college work (8 semester hours, one half of which must be laboratory work).

Chemistry: At least two years of college work ( 10 semester hours of inorganic chemistry including short or preliminary courses in qualitative and quantitative analysis, and 6 semester hours of organic chemistry; one half of each course must be laboratory work). These represent the minimal requirements in chemistry. Additional courses in analytical and physical chemistry are desirable.

Physics: At least one year of college work ( 10 semester hours, one half of which must be laboratory work).

English: At least two years of college work (12 semester hours).

Mathematics: At least one year of college work (6 semester hours; a working knowledge of logarithms is essential and one of calculus desirable).

Languages: Two years of study of German and French in High School or in College are desirable but not a necessary requirement.

Selection will be based on the quality rather than the quantity of preparation.

## REASONS FOR ENTRANCE REQUIREMENTS

Students, who have been selected carefully on the basis of their intelligence and character, will be admitted to the School of Medicine after two years of college work for the following reasons:
(1) Two years of college work are sufficient for an adequate preparation in chemistry, biology, physics, English and mathematics ; (2) two years of additional postgraduate interne training are more valuable than the junior and senior years in college ; (3) experience has demonstrated that the majority of medical students who have had four years of college work and who are, therefore, 21 or 22 years of age, rarely spend more than one year in postgraduate interne training; (4) there is no relationship between the quality of the student's intelligence and the quantity of hours spent in college; (5) a complete college course is unnecessary today because many of the subjects formerly studied in college are now taught in high school; (6) a reading knowledge of German and French is not necessary today because of the prompt abstracting of foreign medical journals; (7) culture is acquired more often at home and from associations and environment early in life than in college; (8) two years of training in the basic sciences after graduation from medical school are more valuable than the junior and senior years in college for those who later are to do scientific investigative work in medicine; (9) the junior and senior years in a college in which the gifted student is not given special advantages frequently cause habits of academic indolence; (10) the present average age of entering practice will be maintained if the two years which are usually spent in the junior and senior classes in college are applied to additional postgraduate interne training; (11) medical students who are 19 years of age usually learn more rapidly than those 22 years of age; (12) in medical schools in which there are students with
two, three and four years of college work it is often difficult to distinguish those who have had the different lengths of preparation.

## REQUIREMENTS FOR ADMISSION TO ADVANCED STANDING

In addition to the requirements for entrance, an applicant for admission to the third year class must present evidence that he will complete successfully the first and second year curriculum in a class A medical school consisting of: Gross and microscopic anatomy, biochemistry, pharmacology, physiology, gross and microscopic pathology, bacteriology, clinical microscopy, normal and abnormal physical diagnosis. Students who transfer from other medical schools can be admitted into any quarter for which their previous training has fitted them (see curriculum). For example, a student who has completed successfully the first and second year curriculum at another medical school is eligible to enter the summer quarter in June and to be graduated in December of the following year, or he can enter the autumn quarter in October and receive the M.D. degree in March or June two years later, depending on whether he attends the intervening summer quarter. Application forms may be obtained by writing to the Dean, Duke University School of Medicine, Durham, N. C.; they will be evaluated and a decision in regard to admission made as described for applications for admission.

## REQUIREMENTS FOR THE DEGREE OF BACHELOR OF SCIENCE IN THE SCHOOL OF MEDICINE

Duke University will grant the degree of Bachelor of Science to students who have completed satisfactorily 70 semester hours of college work in Duke University or an acceptable college or university, six quarters in the Duke University School of Medicine, creditable extra work in one or another department and have written $x$ thesis. No credit will be given toward this degree for additional college work. Students who wish to become eligible for this degree should, as soon as possible after admission, arrange a program of extra work with the head of any department they desire.

## REQUREMENTS FOR THE DEGREE OF DOCTOR OF MEDICINE

Comprehensive group examinations in the preclinical subjects will be given to the students after they have completed six quarters, and in the clinical subjects at the end of the twelfth quarter. These examinations will be held at least twice each year to accommodate students who qualify for them at different times. They will demand a more comprehensive knowledge of medicine than can be obtained from the required courses in the schedule, and it will be necessary for the student to demonstrate that he has utilized profitably his free time. No numerical grades will be given; only the terms "passed" and "failed" will be used. The degree of Doctor of Medicine will be conferred upon those who, after fulfilling all the requirements for entrance, have completed satisfactorily twelve quarters of the curriculum of the School of Medicine and have passed the preclinical and clinical group examinations. Students in any class are admitted on the understanding that only those will be advanced who, in the opinion of the committee on instruction, give promise of being a credit to themselves and the school. At the end of each quarter, the committee on instruction will review the records of all students and those whose progress has been unsatisfactory will be advised to repeat the work of that quarter or to leave the school. Students who have been admitted to advanced standing and those who have studied at other medical schools for part of their course must present evidence that they have completed successfully work comparable to that of the curriculum during the quarters in which they were away.

All students are urged to spend three years in hospital or laboratory work after graduation and they must give assurance satisfactory to the committee on instruction that they will spend at least two years.

## CURRICULUM OF THE SCHOOL OF MEDICINE

A year of a student's life can be saved so that it can be applied to postgraduate interne training by condensing the usual four medical school years of thirty-three weeks each into three years of forty-four weeks each. Four terms of eleven weeks will be given each year, commencing October first, with vaca-
tions of one week in December, March and June, and of one month in September, and the degree of M.D., will be granted after the satisfactory completion of twelve terms. These may be taken consecutively (graduation in three calendar years), or three terms may be taken each year (graduation in four calendar years). Such a curriculum will affect in no way the courses at any other medical school. If students who have received their first two years of training at other medical schools wish to spend their clinical years at the Duke University School of Medicine, they are eligible in June or October for the seventh term, which corresponds to the beginning of the usual third year class.

The advantages of this continuous curriculum to the medical student are obvious. He will be one year younger at graduation and will have an additional year for hospital or other training ; he will be better prepared, for he will not have lost a fortnight or a month in October of each year getting back into the intellectual stride which had been his in the preceding June, and he will see the clinical material peculiar to the summer months.

The disadvantages to the medical student have been overemphasized. For example, it is said that he needs four months of vacation. However, practically all medical students at the present time work during their summer holidays; fifty per cent study preclinical or clinical subjects in some place or other and if this time is spent under supervision at a medical school the character of the work will be improved and much valuable time saved. The fifty per cent who earn money during the summer vacations probably can earn more in the year which they will save under the four-quarter system than in the three periods of four months each. The Angier B. Duke Memorial and other loan funds, rather than scholarships, will do much to solve this phase of the problem. It has been said that a medical student cannot endure physically the work of forty-four weeks a year. If so, he probably should enter some less arduous occupation, for as a physician he undoubtedly will have to work as hard or harder for longer than forty-four weeks a year. The total of eight weeks of vacation, which every student will have under the four-quarter system should be sufficient for anyone. The argument that the summer climate of Durham or of any other city would be injurious to medical students is refuted readily by weather statistics, and also by the realization that the major
part of the population remains at work all summer and that practically all the physicians continue their practices. As a matter of fact, if any student prefers to study four calendar years of thirty-three weeks each he can do so under this flexible curriculum. A certain number of students, either through illness or through financial difficulties, probably will be absent one or more quarters, but under this curriculum they can take up their work at the beginning of the next quarter and not lose a whole year as is usually necessary. This irregularity is in itself an advantage, for it will reduce the usual rigid lock-step succession of studies.

Approximately one half of the time in this curriculum is free for elective work or anything else which the student wishes to do. In the first year the greatest amount of free time is concentrated in the latter part of the year in order to give the student a more varied curriculum early in his course and thus enable him to choose elective courses from a wider range of subjects. The summer quarters of the first and third years have been left entirely free in the hope that many of the students will migrate to other medical schools in this country or abroad for elective work, a practice which should be encouraged. The establishment of the four quarter system at Chicago, Northwestern, Tulane and other universities will aid greatly this exchange of students. For students who do not attend the summer quarters, the spring quarters of the second and fourth years are free for the same purpose. The students who do not transfer temporarily to other medical schools may utilize their free time in elective courses in preclinical and clinical departments, may pursue independent work in any subject or may do research work. The elective courses have been organized for small groups and will be repeated if necessary in one or more quarters.

## Curriculum of Four Quarters of Eleven Weeks (429 Hours) Each

(The details of courses will be posted on the bulletin board)
Hours
Autumn quarter (1st)—Oct. 2-Dec. 20, 1930
Anatomy (including histology) ............... 429
Free time .......................................
Total
429School of Medicine
Winter quarter (2d)-Jan. 2-Mar. 21, 1931
Physiology ..... 160
Biochemistry ..... 144
Free time ..... 125
Total ..... 429
Spring quarter (3d)—Mar. 30-June 13, 1931
Pharmacology ..... 56
Bacteriology ..... 88
Psychobiology ..... 16
Free time ..... 269
Total ..... 429
Summer quarter (4th)—June 22-Sept. 5, 1931
Free time ..... 429
Total ..... 429
Autumn quarter (5th)—Oct. 1-Dec. 19, 1931
Pathology ..... 288Free time141
Total ..... 429
Winter quarter (6th)—Jan. 4-Mar. 22, 1932
Clinical microscopy ..... 96
Medical psychology ..... 16
Physical diagnosis ..... 160
Preclinical examinations ..... 39
Free time ..... 118
Total ..... 429
Autumn quarter (7th)—Oct. 2-Dec. 20, 1930*
Medicine (junior) (including pediatrics and preventive medicine) ..... 286
Free time ..... 143
Total ..... 429Hours
Winter quarter (8th)—Jan. 2-Mar. 21, 1931*
Surgery (junior) ..... 154
Obstetrics (including gynecology) ..... 110
Free time ..... 165Total42927
Spring quarter (9th)—Mar. 30-June 13, 1931*
Specialties (junior) ..... 198
Free time ..... 231
Total ..... 429
Summer quarter (10th) -June 22-Sept. 5, 1931*
Medicine (senior) (including pediatrics and preventive medicine) ..... 286
Free time ..... 143
Total ..... 429
Autumn quarter (11th)—Oct. 1-Dec. 19, 1931*
Surgery (senior) ..... 220
Free time ..... 209
Total ..... 429
Winter quarter (12th)—Jan. 4-Mar. 22, 1932*
Final clinical examinations ..... 39
Free time ..... 390
Total ..... 429
Summary:
Total number of hours of required instruction. .2,785 (54\%)
Total number of hours of free time. ..... 2,363 (46\%)
Total number of hours in curriculum ..... 5,148 (100\%)Changes from the Four-Quarter Schedule Necessary for Students WhoDo Not Attend the Summer Quarters; Third Year Students Admittedon October 1, 1930, Who Do Not Wish to Study During theSummer Quarter in 1931 Will Follow this ScheduleCommencing with the Autumn Quarter (10th)of the Fourth Year
First Year:
Autumn quarter (1st) - No change from schedule.
Winter quarter (2d) - No change from schedule.
Spring quarter (3d)-No change from schedule.

## Second Year:

Autumn quarter (4th)-Same as fifth quarter in schedule.

[^0]Winter quarter (5th)-Same as sixth quarter in schedule except that the preclinical examinations are postponed to the end of the spring quarter and the amount of free time increased correspondingly to 157 hours.
Spring quarter (6th)-Same as fourth quarter except that the preclinical examinations are held and the amount of free time correspondingly decreased to 390 hours.

## Third Year:

Autumn quarter (7th) - Same as seventh quarter in schedule.* Winter quarter (8th) - Same as eighth quarter in schedule.*
Spring quarter (9th) - Same as ninth quarter in schedule.*

## Fourth Year:

Autumin quarter ( 10 th) -Same as tenth quarter in schedule.*
Winter quarter (11th)-Same as eleventh quarter in schedule.*
Spring quarter (12th)-Same as twelfth quarter in schedule.*

## SCHEDULE OF INSTRUCTION

(The details of courses will be posted on the bulletin board)
In the clinical years the required instruction in medicine, surgery, obstetrics, gynecology, pediatrics and other specialties will be offered in each of the four quarters. Students may elect the quarters in which they study these subjects, but not more than ten students will be enrolled in surgery or medicine in any one quarter ; the names will be accepted in order of application. The schedule on the bulletin board merely illustrates the program for one group. For elective courses, students are referred to the bulletin board.

During the quarter devoted to the specialties, the student group will be divided into five sub-groups, each of which in rotation will spend approximately two weeks in each of the following specialties: Dermatology and syphilis; neurology and psychiatry, urology; orthopedics and physiotherapy; ophthalmology, oto-laryngology and dentistry.

Daily from 12 noon to $1 \mathrm{p} . \mathrm{m}$. during the autumn, winter and spring quarters, the following systematic lectures, clinics or demonstrations, will be given (students are expected to attend

[^1]at least three quarters) : Medicine and medical specialties, Wednesdays and Saturdays (3 quarters); surgery and surgical specialties, Tuesdays and Fridays (3 quarters) ; obstetrics and gynecology, Mondays (3 quarters) ; pediatrics, Thursdays (2 quarters); preventive medicine and public health, Thursdays (1 quarter).

Every Saturday, from 9 a. m. to 1 p. m., varied clinics and demonstrations for students and visiting physicians will be held in medicine, surgery, obstetrics, pediatrics and other specialties.

## ANGIER B. DUKE MEMORIAL AND OTHER LOAN FUNDS

The Angier B. Duke Memorial, Incorporated, administers through an advisory committee of the officers of the University a loan fund for students. In addition, the University administers other endowed loan funds for the benefit of students who are not able financially to meet their expenses. Medical students, after their third quarter, are eligible for loans from these sources. No scholarships will be awarded in the School of Medicine. The loan funds are kept by the treasurer as separate and distinct funds from all other endowments and holdings of the University and are used for no other purpose than to aid worthy students of the University. These funds are administered in accordance with the following regulations:

1. No loan shall be made to a student who violates any of the regulations of the University or whose classwork is not satisfactory to the committee on instruction.
2. Loans will be made only to students who are taking full courses of study that lead to a degree, and all loans must be arranged not later than one week after the beginning of a quarter.
3. Every applicant for a loan must present with the application such security as the president of the University may approve, and no money shall be advanced before a note with approved security is in the hands of the treasurer of the University.
4. No loan shall be made to defray any other expenses than those incurred during the academic year for tuition, board and room-rent.
5. Interest at the rate of six per cent annually shall be charged for all loans of money, and the interest must be paid annually.

## INFORMATION AND REGULATIONS CONCERNING FEES AND EXPENSES

All fees for each quarter are due and payable at the beginning of each quarter; no student will be admitted to classes until his or her fees have been paid at the university treasurer's office.

## Fees and Expenses

Tuition, per quarter . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 150.00$
Room rent, per quarter* .................................... 50.00
Board, per quarter* ......................................... . . 75.00
Laundry, per quarter . ..................................... . . 10.00 to $\$ 20.00$
Books, per quarter ....................................... 10.00 to 20.00
Microscope, each student must own a modern
microscope as soon as he matriculates.............. 100.00 to 150.00
Damage fee, payable at matriculation and returnable
at graduation if no damage occurs ................. 10.00
Athletic fee (optional), admitting students to all
athletic contests held on the university
grounds, per year ..................................... 10.00
Estimated total expenses, exclusive of clothes, micro-
scope, damage and athletic fees, per quarter
(students may study three or four quarters
per year)** ............................................ $\$ 295.00$ to $\$ 315.00$

[^2]
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## BULLETIN

OF

# Duke University 

## SUMMER SCHOOL



1930

June 10-July 19; July 21-August 28
ANNOUNCEMENT
Junalusra Summer School, Inc.
(Affiliated with Duke University)
Lare Junalusra, N. C.
ANNOUNCEMENT
Junaluska School of Religion
Lake Junaluska, N. C.

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UNDER ACT OF AUGUST 24, I9I2


## BULLETIN

# OF <br> Duke University 

## SUMMER SCHOOL ANNOUNCEMENT



1930

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(Affliated with Duke University)
Lake Junaluska, N. C.
ANNOUNCEMENT
Junaluska Schoolof Religion
Lake Junaluska, n. C.

# SUMMER SCHOOL ANNOUNCEMENT 

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WILLIAM HANE WANNAMAKER, A.B., A.M., Litt.D., Vice-President of Duke University and Member of the Faculty Committee on the Summer School

HOLLAND HOLTON, A.B., J.D., Director of the Summer School and Chairman of the Faculty Committee on the Summer School

WILLIAM KENNETH BOYD, A.B., A.M., Ph.D., Member of the Faculty Committee on the Summer School
alice mary baldwin, A.B., A.m., Ph.D., Dean of Women

WIlliam HENRY GlasSon, Ph.B., Ph.D., Dean of the Graduate School of Arts and Sciences

ARTHUR MARCUS PROCTOR, A.B., A.M., Associate Director of the Summer School

MARY GRACE WILSON, A.B.,
Social Director and Acting Dean of Women
FACULTY
JAMES CANNON, III., (Duke University),
A.B., Duke; A.M., Princeton; Th.B., Th.M., Princeton Theological Seminary; Edinburgh, 1919; Garrett, 1924;

Biblical Literature
BENJAMIN GUY CHILDS, (Duke University),
A.B., A.M., University of Virginia; University of Virginia, 1920-22; Education. [3]

# WILLIAM JOSEPH HENRY COTTON, (Duke University), 

A.B., Temple University; A.M., Ph.D., University of Pennsylvania; Economics.

BERT CUNNINGHAM, (Duke University),
B.S., M.S., Illinois Wesleyan; A.M., Duke; Ph.D., University of Wisconsin; Biology.

WILLIAM WHITFIELD ELLIOTT, (Duke University),
B.A., Hampden-Sydney; M.A., University of Kentucky; Ph.D., Cornell; Mathematics.

PAUL NEFF GARBER, (Duke University),
A.B., Bridgewater; A.M., Ph.D., University of Pennsylvania; Crozer Theological Seminary, 1919-21;
Religion: Church History
WALTER KIRKLAND GREENE, (Duke University),
A.B., Wofford; A.M., Vanderbilt; A.M., Ph.D., Harvard; English.

> WILLIAM HOLLAND HALL, (Duke University),
A.B., A.M., Duke; B.C.E., University of Michigan; M.S.C.E., University of Wisconsin; Engineering.

CHARLES CLEVELAND HATLEY, (Duke University), A.B., Duke; A.M., Ph.D., Columbia; Physics.

HOLLAND HOLTON, (Duke University),
A.B., Duke; J.D., The University of Chicago; The University of Chicago, 1926-27;
Education.
CALVIN BRYCE HOOVER, (Duke University),
A.B., Monmouth College; University of Minnesota, 1923-25; Ph.D., University of Wisconsin;

Economics.

BRADY RIMBEY JORDAN, (Duke Unizersity),
Litt.B., Prınceton; Ph.D., Wisconsin; French.

CHARLES ALBERT KRUMMEL, (Duke Unizersity),
Ph.B., Central Wesleyan College; Ph.M., Syracuse University; Ph.D., University of Wisconsin; University of Marburg, 1910;

German.
JESSE MARVIN ORMOND,
(Duke University),
A.B., Duke; B.D., Vanderbilt; Sociology.

ARTHUR MARCUS PROCTOR, (Duke Uniz'ersity), A.B., Duke; A.M., Columbia; Columbia, 1921-23, 1929-30; Education.

WILLIAM WALTER RANKIN, (Duke Uniz'ersity),
B.E., North Carolina State College of Agriculture and Engineering; M.A., University of Nurth Carolina; Harvarl, 1914-15; Columbia, 1919-21;

Mathematics.
HERSEY EVERETT SPENCE, (Duke Uniz'ersity),
A.B., A.M., B.D., Duke; The University of Chicago, 1927-28;

Religious Education.
ROBERT NORTH WILSON, (Duke Unizersity),
A.B., Haverford; M.S., University of Florida; Harvard, 1905-06;

University of Illinois, 1923-24;
Chemistry.
THOMAS PERKINS ABERNETHY, (University of Alabama),
A.B., M.A., College of Charleston; A.M., Ph.D., Harvard; History.

ANDREW RUNNI ANDERSON, (Unizersity of Utah),
A.B., University of Wisconsin; Ph.D., Harvard: Latin.

ROBERT LEE BATES, (Virginia Military Institute),
A.B., LL.B., West Virginia University; A.M., Ph.D., Johns Hopkins Psychology.

JOHN WINDER CARR, Jr., (Duke University),
A.B., Duke; A.M., Ph.D., Columbia; Education.

LEWIS CHASE,
(Duke University), A.B., A.M., Ph.D., Columbia; English.

LUTHER MASON DIMMITT, (Duke University),
B.A., Westminister College (Mo.); A.M., University of Texas; Th.M.,

Princeton; Universty of Pennsylvania, 1927; Columbia, 1926-28; Education.

HASTINGS EELLS,
(Ohio Weslcyan University),
A.B., Clark University; A.M., B.D., Princeton; Ph.D., Yale; Brussels University, 1921-22; Ghent University, 1928.29;

History.

## WILLIAM DANIEL ELLIS,

 (Principal of Richmond Normal School. Richmond, Va.), A.B., A.M., Randolph-Macon; A.M., Columbia; Columbia, 1922-23, 1929-30; Education.GEORGE HOBEN ESTABROOKS, (Colgate University),
B.A., Acadia University; Diploma of Education, Diploma of Anthropology, Oxford University; Ph.D., Harvard; Psychology.
GEORGE DEWEY HARMON, (Lehigh University),
A.B., A.M., Duke; University of Pennsylvania, 1923-25; History.

## EVELYN JONES HAWKES,

 (New Jersey College for Women),A.B., A.M., Duke; Ph.D., University of Pennsylvania; Education.

CHARLES E. LANDON, (Duke University), A.B., A.M., University of Kansas; Ph.D., University of Illinois; Economics.

EDWIN RAY HUNTER, (Maryville College),
A.B., Maryville College; A.M., Ph.D., The University of Chicago; English.

JOHN THOMAS LISTER, (College of Wooster),
A.B., Butler College; Ph.B., A.M., Ph.D., The University of Chicago; Universite de Geneva, 1901;

Spanish.
EDWARD ROY CECIL MILES, (Duke University),
B.S., Georgia School of Technology; M.A., Harvard; Ph.D., Rice Institute; Mathematics.

ROBERT BELL MICHELL,
(University of Wisconsin),
B.A., University of Toronto; A.M., Harvard; Ph.D., Wisconsin; French.

FRANK KIRBY MITCHELL, (Duke University),
A.B., Millsaps; A.M., Michigan; Oriel College, Oxford, 1921-24;

English.
KARL BACHMAN PATTERSON, (Duke University),
A.B., Roanoke Collcge; A.M., Princeton; Johns Hopkins University, 1908-09; University of Pennsylvania, 1909-11; Mathematics.

ROBERT STANLEY RANKIN, (Duke University),
A.B., Tusculum College; A.M., Ph.D., Princeton;

Economics.
ALBERT GRANBERRY REED,
(Louisiana State University),
A.B., Vanderbilt; M.A., Yale; Ph.D., Harvard;

Englise.

CULVER HAYGOOD SMITH, (Carnegie Institute of Technology), A.B., Duke; A.M., Yale; Yale, 1923-25; Duke University, 1929.30; History.

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    ANCEL ROY MONROE STOWE,
    (Randolph-Macon Woman's College),
Ph.B., A.M., Northwestern University; A.M., Harvard; Ph.D., Columbia;
                        Education.
            DENNIS CLAYTON TROTH,
                            (University of Illinois),
                B.Ed., A.M., Ph.D., University of Washington;
                                    Education.
            WARREN CHASE VOSBURGH,
                (Duke Unizersity),
            B.S., M.S., Union College; Ph.D., Columbia;
                        Chemistry.
            LORING BAKER WALTON,
                (Duke University),
    A.B., Princeton; Lic.èt L.., llarvard; Sorbonne, 1922.24;
                                    French.
            FREDERICK ELIPHAZ WILSON,
                (Duke University),
    A.B., Oberlin; A.M., Columbia; Leipzig, 1916.17; Harvard, 1922.23;
                                    German.
            ROBERT RENBERT WILSON,
                    (Duke University),
            A.B., Austin College; A.M., Princeton; Ph.D., Harvard;
                Economics.
            GEORGE SHERMAN AVERY, Jr.,
            (Duke University),
    B.S., Tulane; M.S., Dartmouth; Ph.D., University of Wisconsin;
                            Botany.
            HENRY STODDARD CURTIS,
(State of Missouri, Director of Hygiene and Physical Training),
    A.B., Olivet College (Mich.); A.B., Yale; Ph.D., Clark;
                                    Education.
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KADER RANDOLPH CURTIS, (Superintendent of Wilson County and City Schools), A.B., Wake Forest; Duke University, 1927.28;
Education.
THERESA DANSDILL, (Director of Child Health Education, North Carolina Tuberculosis Association),
A.B., Des Moines University; A.M., Columbia; Health Education.
IONE HENDERSON DUNN, (Asheville Tcachers College), A.B., North Carolina College for Women; M.Ed., Duke; Education. MILDRED ENGLISH, (Assistant Superintendent, Ralcigh City Schools), B.S., M.A., Peabody; Columbia; Education.
OSCAR ALEXANDER HAMILTON, (New Hanover County Schools),
A.E., University of North Carolina; A.M., Columbia; Education. CHARLES ROY HAUSER, (Duke University), B.S., M.S., University of Florida; Pl.D., University of Iowa; Chemistry.
LEMUEL ROY JOHNSTON, (Principal High Point High School), A.B., University of North Carolina; A.M., Columbia; Education.
ARCHIBALD CURRIE JORDAN, (Duke University),
A.B., Duke; A.M., Columbia; Columbia, 1924-25;
English.
MATILDA OSBORNE MICHAELS, (Supervisor Durhan County Schools), A.B., Duke; A.M., Columbia; Elementary Education.

# JESSE LEE PETERSON, (University of Florida), 

A.B., A.M., Duke; Columbia, 1926-27; English.

ESTELLE RAWL, (Supervisor Charlotte City Schools), A.B., Winthrop; Smith College, 1922-23; Chicago, 1926-27;

Elementary Education.

## JOHN HENRY SAYLOR, (Duke University),

A.B., Southern Methodist University; A.M., Duke; Duke, 1928-30; Chemistry.

JOHN HERMAN SHIELDS, (Duke University),
A.B., A.M., University of Texas; Columbia University, 1924-26; Economics.

FREDERICK EDWARD STEINHAUSER, (Duke University),
A.B., A.M., University of Chicago; Spanish.

JANE CAROLINE SULLIVAN, (High School Supervisor, Buncombe County), A.B., Duke; A.M., Columbia; Primary Education.

CHARLES EUGENE WARD, (Duke University),
A.B., Baker University; A.M., Duke; Duke, 1928-29; English.

CLARENCE SHAW WARREN, (Superintendent Lenoir City Schools), A.B., Duke;

Education.
AUGUSTA MICHAELS ALSTON, (Durham City Schools), A.D., Duke; Drawing.
BARTEL L. DEBRUYNE, (Durham High School), Graduate High Cominercial School, Osnabrück, Germany; High School Demonstration Teacher in Mathematics.
CANEY EDWARD BUCKNER, (Durham High School), A.B., A.M., Duke; High School Demonstration Teacher in History.
ALFRED DIXON CALLIHAN, (Duke University), A.B., Marshall College; Assistant in Physics.
ATHEY GRAVES GILLASPIE, (Duke University),
B.S., Lynchburg College; Cornell, Summer 1928; Duke, 1929-30; Assistant in Chemistry.

## ELIZABETH GRAY,

 (Durham City Schools), A.B., A.M., Duke;Primary Demonstration Teacher.

> WILBERT ARMONDE JENKINS, (Fellow in Biology, Cornell University),
A.B., A.M., Duke; Cornell, 1929-30; Biology.
PATTE JORDAN, (High Point City Schools),
A.B., North Carolina College for Women;
Intermediate Grade Demonstration Teacher.
ALVIN VELBERT METLER, (Duke University),
B.S., Adrian College; University of Michigan, 1927-28; Duke, 1929-30;
Assistant in Chemistry.

## HUBERT WESLEY STEPHENS

(Duke University),
B.S., Illinois Wesleyan University;
Assistant in Physics.

# THE SUMMER SCHOOL OF DUKE UNIVERSITY 

## RAPID GROWTH OF THE DUKE UNIVERSITY SUMMER SCHOOL

Trinity College, which in 1925 expanded into Duke University, conducted its first summer school in 1919. The growth of the school has been not only rapid but steady since that time. In 1919, there were enrolled eighty-eight students of college grade, of whom sixty-five were teachers. In 1929 there was a total of 1452 registrations in the Summer School of Duke University and affiliated schools. Of these, 765 students enrolled in the first term of Duke University Summer School, and 447 in the second term; 214 were enrolled in the Junaluska Summer School, Inc., at Lake Junaluska; and 26 were enrolled in the Junaluska School of Religion. Deducting from the total number of registrations those who registered for two terms, there were 1171 students enrolled for either six or twelve weeks in the summer of 1929 .

## AFFILIATED SUMNER SCHOOLS

The Junaluska Summer School, Inc., Lake Junaluska, N. C., is an independent school affiliated with Duke University. It will offer courses primarily for high school graduates and teachers holding the elementary certificates. It will also offer freshman and sophomore college work in Biblical literature, education, English, history, sociology, Spanish, and other undergraduate courses for high school teachers. The only graduate work offered will be in field botany. (For further information address Professor B. G. Childs, Director, Duke University, Durham, N. C., and see description of courses, pages 39 to 50 , this bulletin.) Junaluska Summer School will begin its single term June 10 and close July 19, making it possible for a student attending Junaluska to transfer to Durham in time for the second term, July 21 to August 28.

The Junaluska School of Religion, affiliated with the School of Religion, will offer work at Lake Junaluska July 21 to August 30. (For further information address Dr. Elbert Russell, Act-
ing Dean, School of Religion, Duke University, Durham, N. C., and see description of courses on pages 51 to 54 , this bulletin.)

## CALENDAR

The Summer School will open June 10. The first term of the school will close July 19. The second term will begin July 21 and will close August 28. Recitations will be held five days in the week, all Mondays except June 23, July 7, July 21, August 4, and August 18 being holidays. July 4 will be observed as Independence Day.

## REGISTRATION

Saturday, June 7, is registration day for Durham County and City teachers and for all other students in Durham on that day. Monday, June 9, is registration day for out-of-town students. All such students should be present at 2 P.M. to submit their credentials for admission, to select their courses, and to make arrangements concerning board and lodging. Students arriving after 5 P.M., Monday, will register Tuesday, June 10, 8:30 A.M., or 2 P.M. Regular classes will meet at $8: 15$, Tuesday morning, and recitation work will begin at once according to schedule.*

For the second term, Saturday, July 19, is registration day, and classes will begin Monday, July 21, according to schedule.

## BUILDINGS AND EQUIPMENT

The work for the Summer School of 1930 will be conducted largely in the unit of new buildings on the old campus. This unit consists of an auditorium, a science building, an apartment building, and five dormitories. All buildings in this new group are in Georgian style of architecture, constructed of Baltimore brick and trimmed with Vermont marble. They are fireproof in every respect.

Each of the five new dormitories has eighty-one students' rooms and houses one hundred and sixty-two students. One of the men's dormitories will be reserved exclusively for advanced students, and a wing of one of the women's dormitories will be similarly reserved. In all dormitories the same rules

[^3]and regulations obtain as during the regular academic year. In the graduate dormitories all radios, graphophones, and other noise-making appliances are strictly forbidden.

The Union Building is to be the center of all social activities: besides containing two large student dining rooms, this building has a faculty dining-room, a guests' dining-room, two lounge rooms, offices for the manager and his staff, service-rooms, and rooms for every organization and activity; here will be found the post office, college barber shop, express office, and headquarters of all publications and student organizations.

## ADMISSION

Applicants for admission must have completed a high school course. As evidence of this, a teacher's certificate of grade as high as North Carolina elementary will be accepted from teachers with two or more years of experience. Certificates and other credentials must be submitted to the Committee on the Summer School at the time of registration. Students who wish to enroll for graduate credit should submit their credits from other institutions to the Director of the Summer School before registration, preferably by mail.

## SCOPE AND PLAN

The courses are designed to meet the needs of teachers who desire professional training and further academic instruction, of college students who desire to hasten the completion of their college work, and of graduate students desiring to continue their work toward a higher degree.

Professional courses are offered for the following grades of teachers:

1. Teachers in elementary schools: the "North Carolina 'Uniform Curricula' for Elementary Teachers." (See pages 28 to 30, this bulletin.)
2. Teachers of primary and grammar grades. (See pages 26 to 28 . This work is stressed in the session of 1930.)
3. High school teachers. (See pages 25 and 26, and for subjectmatter work in the high school subjects, pages 30 to 38.)
4. Teachers who desire credit for degrees in Duke University. (For graduate work in each department, see courses designated " $G$," pages 23 to 38.$)$
5. Superintendents, supervisors, and principals of schools. (See pages 23 to 25 .)

For college students, as well as for teachers, instruction, graduate or undergraduate, is offered as designated on pages 23 to 38, in the following subjects : education, Biblical literature, biology, chemistry, engineering, English, economics and government. French, German, history, religious education, Latin, mathematics, physics, psychology, and Spanish.

## CREDITS

The professional credits offered are accepted by the State of North Carolina in accordance with the rules issued by the State Department of Education.

College credits are offered as follows : A course of five hours a week for six weeks counts for two semester-hours of credit, a course of seven hours and a half a week for six weeks counts for three semester-hours of credit, and a course of ten hours a week for six weeks counts for four semester-hours of credit in Duke University. No student is given credit for more than six semester-hours of work or allowed to take more than fifteen hours of work a week without the consent of the Director and of the instructor in whose department the student expects to do his major work.* Graduate students are not under any circumstances allowed credit for more than six semester-hours in a summer school of six weeks.

The nature of the credit allowed for each course is designated by the following letters: C. collegiate A.B. degree: G, graduate A.M. or MI.Ed. degree. Courses marked C* are intended only for students who have had two or more years of standard college training. Courses marked both C* and G are open only to students who have had three or more years of standard college training except by special permission of the Council on Graduate Instruction.

Students registered for graduate courses in the Summer School. who desire to have their work credited toward the master's degree, should also register in the office of the Dean of the Graduate School during the first week of each summer term.

[^4]
## GRADUATE INSTRUCTION

Students who have received a bachelor's degree for a four years' undergraduate course from a college of sufficiently high standing may be admitted to take courses in the Graduate School of Arts and Sciences of Duke University. The department concerned will determine whether a student is prepared to take any particular course. Admission to graduate courses does not necessarily imply admission to candidacy for a degree. A candidate for admission as a graduate student should present satisfactory evidence that he has received a bachelor's degree from a college or university which is a member of the Association of Colleges and Secondary Schools of the Southern States or of one of the similar associations in other sections of the country (provided that the degree must have been conferred after the admission of the college or university to membership in said association); or from a North Carolina college whose bachelor of arts' or other bachelor's degree is accepted by the State Department of Education as the basis for issuing the high school or primary certificate of Class A. A degree from an institution outside of the state of North Carolina, not provided for above, may be accepted when an investigation in the individual case shows that qualifications are satisfactory.

## ADVANCED DEGREES

The degrees offered in the Graduate School of Arts and Sciences are master of arts (A.M.), master of education (M.Ed.), and doctor of philosophy (Ph.D.). Some departments of the University are now prepared to give a full program of work leading to the degree of doctor of philosophy; other departments are gradually enlarging the scope of their instruction. As rapidly as is consistent with careful selection, new appointments are being made to the faculty of professors who will give their attention primarily to graduate courses and the direction of research.

## ADMISSION TO CANDIDACY FOR A DEGREE

A graduate student who desires to be accepted as a candidate for a degree should file with the Dean of the Graduate School an official transcript of the record of his undergraduate work and also of any graduate courses he may have completed. He should also confer with the head, or chairman, of the department in which he desires to take his major work. Applications for admission to candidacy for the degree of master of arts or master of education should be made at the beginning of the first year of graduate work, and for the degree of doctor of philosophy at the beginning of the second year of graduate work. Before receiving recognition as a candidate for a degree, the student must satisfy both the general requirements of the Graduate School and the special requirements of the department in which he is taking his major work.

## THE DEGREE OF MASTER OF ARTS

Candidates for the degree of master of arts are required to have a reading knowledge of two foreign languages, evidenced by examination or by credit obtained for at least six semester-hours of college work in
each. If this requirement has not been satisfied before admission to candidacy for the degree, the required foreign language work must be completed before the degree is conferred and will not be counted for credit toward the degree. The two foreign languages offered must be acceptable to the departunent in which the candidate is taking his major work.

To obtain the degree of master of arts a candidate must complete satisfactorily twenty-four semester-hours of graduate courses and a thesis. The credit for the thesis is six semester-hours. Each candidate for the degree must select a major subject in which the minimum requirement is twelve semester-hours and the thesis. [Before selecting his major in a department, a student must have completed a minimum of twelve semester-hours of approved preliminary courses in that department and twelve additional semester-hours either in that department or in related work.] A candidate must take six semester-hours of graduate work in a minor subject approved by the major department, and the remaining six semester-hours in the major or minor subjects or in a department approved by the major department and by the Graduate Council. No undergraduate course may be credited toward the degree of master of arts.

## MINIMUM RESIDENCE REQUIREMENT

The minimum residence requirement of candidates for the master's degree is one academic year. Often a longer period of residence will prove necessary. In the case of graduate students who take all the work for the master's degree in the Summer School, the minimum residence requirement is five summer terms of six weeks each.

## DEGREE OF MASTER OF EDUCATION

The degree of master of education is granted to teachers, or others engaged in educational service, upon completion of the prescribed program of study. Candidates for the degree must have had two years of practical experience in teaching when the degree is conferred. This experience may be obtained in the two years immediately prior to entering upon candidacy for the degree, or it may be obtained concurrently with the period of study for the degree.

A preliminary requirement for admission to candidacy for this degree is the completion of a minimum of twelve semester-hours of approved undergraduate work in education, including work in educational psychology and work in either history of education, educational sociology, or school administration.

The requirements for the degree of master of education are twentyfour semester-hours of graduate courses and a thesis. Candidates must take a minimum of twelve semester-hours of work and write a thesis in the Department of Education. At least six semester-hours must be taken in some department other than the Department of Education. Students who are preparing to teach are advised strongly to take twelve semester-hours of graduate work in the subjects they intend to teach. In such cases the thesis may be prepared under the joint supervision of
a department in which the student intends to teach and the Department of Education.

The residence requirements for the degree of master of education are the same as those for the degree of master of arts.

## THESIS FOR THE MASTER'S DEGREE

The title of the thesis required in partial fulfilment of the requirements for the degree of master of arts or master of education must be approved by the department or departments concerned and filed with the Dean of the Graduate School on or before November 1 of the academic year in which it is expected that the degree will be conferred.

Three bound typewritten copies of each thesis must be submitted to the Dean of the Graduate School in approved form on or before May 15 of the year in which the degree is conferred. The thesis is passed upon and accepted or rejected by an examining committee of three members of the faculty. Each candidate is required to appear before the committee for an oral examination on the thesis.

## SUMMER SCHOOL WORK FOR THE MASTER'S DEGREE

Graduate students may not receive more than six semester-hours of credit for work taken in one summer session of six weeks. The degree of master of arts or master of education can be earned in five such summer sessions by students who are well prepared for graduate work. All the work offered for the master's degree must be completed within a period of six years.

## CREDIT TOWARD THE MASTER'S DEGREE FOR WORK DONE ELSEWHERE

No credit toward advanced degrees is given for university extension or correspondence courses.

Not more than six semester-hours of credit toward the master's degree may be given to graduates of Duke University or of other approved colleges or universities for acceptable graduate courses or research work completed elsewhere. Such credit shall not shorten the minimum period of residence required at Duke University.

## FORMER REGULATIONS

Students who began graduate work at Duke University for the master's degree before June, 1930, may complete the requirements for the degree under the regulations published in the Summer School announcement for 1929 and in the bulletin of the Graduate School of Arts and Sciences for the academic year 1928-1929.

## DEMONSTRATION SCHOOL

A demonstration school for primary and grammar-grade teachers is conducted for observation and demonstration work. The term begins Monday, June 16, and closes Saturday, July
26. High school teachers will have opportunity to do observation work in American history and plane geometry.

## ROOMS AND BOARD

Board and room for a term of six weeks may be secured in the University dormitories at the rate of $\$ 45.50$ per occupant with two in a room, or $\$ 55.00$ if room alone is engaged. The new dormitories, Numbers 2 and 3, will be reserved for women students, and Dormitories 4 and 5 for men students. Dormitories 3 and 4 will be reserved primarily for advanced students, and Dormitories 2 and 5 for undergraduates. There is no dormitory reserved for married students, and children are not under any circumstances admitted to the dormitories. Students desiring to bring children, or married students desiring rooms, should write the Director for a list of private rooming places where suitable accommodations may be obtained. Occupants of University rooms furnish their own bedclothes, pillows, and towels. All other essentials are supplied by the University.

All occupants of Dormitories 2 and 3 board in the Union, and occupants of Dormitories 4 and 5 are advised to board there, on account of the opportunity to meet at meal-time with their fellow-students, and because of the fact that the greater number of students guarantees better board for all, board being furnished at cost. The service is cafeteria plate-service. Students in Dormitories 4 and 5 who desire to board elsewhere will pay room-rent at the rate of $\$ 12.50$ with two in a room or $\$ 22.00$ for room alone. Students rooming off the campus who desire board in the University Union obtain it for $\$ 37.50$ for the term.

## FEES

Teachers are not required to pay tuition fees. All other students are charged a tuition fee of $\$ 3.00$ for each college credit hour, or $\$ 1.50$ for each semester-hour. All students, teachers included, pay a registration fee of $\$ 17.00$ per term, which includes the cost of a recreation ticket entitling them to admission to the tennis courts and swimming pool and to all recreational programs, including plays, lectures, etc. Students in the sciences pay the laboratory fees required in regular term work. Students who enroll for more than the normal schedule of work are charged an excess registration fee of $\$ 5.00$.

Major expenses may be estimated as follows for each term:


To this total should be added the tuition fee of $\$ 9.00$ or $\$ 12.00$ charged students other than teachers in the public schools, about $\$ 7.00$ for books, and probably $\$ 3.00$ for miscellaneous expenditures.

## COURSES FOR STUDENTS ENTERING COLLEGE

Increasing numbers of students, particularly those who contemplate entering a medical school, desire to complete the college course in three years. To meet the needs of these students, the Summer School offers a number of courses in freshman college work, enabling 1930 graduates of high school to begin their college course in the summer instead of waiting until September.

## RESERVATION IN ADVANCE

Classes are of limited enrollment. All students should enroll promptly, for all applications, both for classes in which the applicant desires to enroll and for rooms, will be filed in the order in which they are received. Each application for a reservation should be accompanied by a check for $\$ 5.00$ in part payment of the registration fee. This check reserves a room also if the student states a desire to room in one of the university buildings. Make all checks payable to the Summer School of Duke University.

## REDUCED RAILROAD FARES

Reduced railroad rates on the round trip identification plan have been authorized from all stations in North Carolina, South Carolina, Virginia, Georgia, and Florida (except those on Louisville and Wadley Railway, Wadley Southern Railway, Sylvania Central Railway, and Winston-Salem Southbound Railway) ; also from West Virginia east of and including Williamson, via Norfolk and Western Railway. Address the Director of the Summer School for identification blank.

## APPOINTMENT BUREAU

A teachers' appointment bureau is maintained for the benefit of teachers desiring a change of position. There is no charge for this service.

## RECREATION AND ENTERTAINMENT

At the time of registration a season ticket to recreation programs is given to each student. In addition to the right of attending the plays, concerts, and other features of entertainment provided, this ticket entitles the student to use of the tennis courts and of the swimming pool. The swimming pool is open an hour and a half daily for various groups of students. The Quadrangle Pictures, sponsored by the University Y. M. C. A., present an early-evening program twice a week. Three of these programs are included in the features covered by the recreation ticket. There are also early-evening programs of plays and games planned for out-of-doors three or four evenings weekly.

# COURSES OF INSTRUCTION 

## EXPLANATIONS AND ABBREVIATIONS

Classes meet daily five times per week for six weeks unless otherwise indicated. Classes that meet for fifty-minute periods are indicated as carrying two semester-hours of credit. Classes meeting eighty-minute periods daily count for three semester-hours except where credits are stated otherwise.

Courses are arranged alphabetically by departments, except that courses in Education are listed first for the convenience of the large number of teachers who enroll primarily for professional credits. Subdivisions in Education indicate special classes of teachers for whom each group of courses was primarily planned. The number attached to a course, except in case of courses not given the preceding term or in the case of courses designated by the North Carolina State Department, are the same numbers used in describing courses in the regular term, with the letter "S" preceding; for example, Education S 6a and S 6b would correspond to Education 6 of the regular term, "a" and "b" being subdivisions of the complete course. The letters beyond " $b$ " indicate work in the same field as the main course but not duplicating the work listed in the preceding university catalogue.

In the description of courses the following abbreviations occur: $C$ following a course means that the course carries credit for the A.B. degree; $C^{*}$, credit toward the A.B. degree for students having completed two or more years of college work; $G$, credit towards a graduate degree; the numeral 1 means that the course comes the first one-hour period daily, beginning at $8: 15 ; 2$, the second one-hour period, beginning at $9: 15 ; 3$, the third one-hour period beginning at $10: 15$; etc. $A$ means that the course comes the first eighty minutes daily, beginning at $8: 15 ; B$ means that the course comes at the eighty-minute period beginning at $9: 45 ; D$ means that the course meets an eighty-minute period daily, beginning at $11: 45$; $I$ means that the course is offered the first term; $I I$, that it is offered the second term ; $I, I I$, that the course is offered either term. Periods $1,2,3$, and 4 do not conflict, and periods $A, B$, and $D$ do not conflict; but period $A$ conflicts with 1 and $2, B$ with 2 and 3 , and $D$ with 4.
N.B.-Different State Departments of Education grant professional credit for various courses in accordance with their own carefully defined rules. Every student should inquire carefully at or before registration as to what professional credit is allowed for each course in his state.

EDUCATION<br>COURSES PRIMARILY FOR SUPERINTENDENTS, PRINCIPALS, AND<br>SUPERVISORS

(Superintendents, principals, and supervisors will find specialized courses grouped under courses designated "Primarily for High School

Teachers" and "Primarily for Grammar-Grade and Primary Teachers." It is recommended that some work be elected from these special groups. Attention is called to the courses described immediately below as Major Course for County Superintendents and Principals, Major Course for City School Superintendents and Principals, Major Course for Elementary Supervisors and Principals of Elementary Schools, Major Course for High School Teachers.)

M43. Major Course for County School Superintendents and Principals.This course includes S 43 below and allied work selected by the student, with the approval of the instructor in charge of course S43. Schedule to be arranged. 6 s.h. $\dagger I,-C^{*}, G . \quad$ Mr. Proctor and Others (Class enrollment limited to 15 .)

M21. Major Course for City School Superintendents and Principals.-This course includes course S13e and allied work selected by the student, with the approval of the instructor in charge of $\mathrm{SI3}^{e}$. Schedule to be arranged. 6 s.h. $I I-C^{*}, G$. Mr. Proctor and Others (Class enrollment limited to 15. )

M32. Major Course for Elementary Supervisors and Principals of Elementary Schools,-This course includes S32 below and allied courses selected by the student, with the approval of the instructor. Term papers and other assignments and special conferences will center around the technique of teaching and administering the course of study in the elementary school. Schedule to be arranged. 6 s.h. $I, I I-C^{*}, G$.

Mr. Carr and Others (first term) Mr. Ellis and Others (second term)
(Class enrollment limited to 15. )
M10. Major Course for High School Teachers.-This course includes S10 ${ }^{\text {b }}$ below and allied work selected by the student, with the approval of the instructor. Term papers and other assignments will center around the problems of the general methods of teaching and administration of the high school curricula. Schedule to be arranged. 6 s.h. $I, I I-C^{*}, G$.

Mr. Troth and Others
(Class enrollment limited to 15. )
S9. Statistical Methods in Education.-A course intended to familiarize teacher, supervisor, and administrator with the statistical method of treating educational and social data, so as to enable them to interpret and use the results of recent investigation in the science of education. Text-books, special assignments, and reports. D, I. 3 s.h.-C*, $G$.

Mr. Dimmitt

S11. Introduction to a Philosophy of Democratic Education.-A study of fundamental concepts underlying secondary and collegiate educational theory as applied to the preparation of socially efficient citizens for a democracy. Textbooks and discussions. $B, I .3$ s.h. $-C^{*}, G$.

Mr. Stowe

[^5]S13 ${ }^{\circ}$. City School Administration.-A study of the organization and administration of city school systems, including administrative phases of supervision. Students enrolled in this course will be expected to place special emphasis upon that phase of school administration in which they are engaged or are most interested. $A, I I .3$ s.h.-C*, G. Mr. Proctor

S15 ${ }^{\text {b }}$. Principles of Vocational Guidance.-A study of the objectives and underlying principles of vocational education, emphasizing this phase of education in North Carolina and the South. The study seeks to formulate a working program for vocational counsellors and others whose teaching function will involve problems of vocational and educational guidance. Prerequisite: six semester-hours in educational sociology, preferably courses 5 and $15^{2}$. B, II. 3 s.h.-C*, G. Mr. Childs

S15 ${ }^{\text {d }}$. Sociological Study of Elementary Education.-A study of social and economic forces as affecting elementary education. $B, I .3$ s.h.-C*, $G$.

Mr. Ellis
Sl5 $5^{\text {e }}$. Principles of Vocational Education.-A study of the social basis for vocational education; a brief review of the developments in the field up to the present time; an examination of the present practices in the main fields of agricultural, commercial, industrial, and home-making vocational education. $D, I I .3$ s.h.-C*, G.

Mr. Childs.
S28. The Psychology of Learning.-A study of different types of learning, principles which underlie successful guidance of learning, methods and conditions of learning, individual differences, etc. Constant reference to experimental literature. B, I. 3 s.h.-C*, G. Mr. Dimmitt

S29. Problems and Theories of College Education.-An intensive study of important problems confronting American colleges, of efforts being made to solve the problems studied, and of theories of college education underlying those efforts. Lectures, readings, research, and paper embodying results of research study. Open only to graduate students who have taught or who are preparing to teach in college. $A, I .3$ s.h. $-G$.
(Class enrollment limited to 20.)
Mr. Stowe
S30. Methods of Research in Education.-This course is designed for those students who are engaged in or contemplate writing theses in the field of education. It deals with the procedures and criteria for setting up and carrying through sound experiments in education. It also considers those types of research where reflective thinking and documentary evidence are the dominant factors. $D, I .3$ s.h.-G.

> Mr. Holton, Mr. Proctor, and Others

S30X. Thesis Course.-Students desirous of obtaining residence credit toward a thesis in Education are expected to enroll in this course and report regularly upon their problem for discussion and criticism. No student can enroll who is carrying more than three semester-hours of other work. $D, I I$-Residence credit only.

S32. Supervision of Elementary School Subjects.-A course planned to meet the needs of school principals, teachers, and others interested in classroom supervision. Objectives and approved methods in the elementary school subjects. Weekly papers, group conferences, and class discussions. $B, I, I I .3$ s.h. $-C^{*}, G$.

Mr. Carr (first term) Mr. Ellis (second term)

S40. Research in the Organization and Administration of Health Education.A graduate course for principals and superintendents, consisting of research in the principles, objectives, and methods to be followed in the organization of health education into the school program. Lectures and discussions of various phases of school, community, and personal hygiene, with special readings and preparation of papers. $D, I .3$ s.h. $-C^{*}$, $G$.

Mr. H. S. Curtis
S43. State and County School Administration.-A study of state and county organization of public schools, emphasizing underlying principles. $A, I .3$ s. h.-C*, G.

Mr. Proctor

## COURSES PRIMARILY FOR HIGH SCHOOL TEACHERS

(High school teachers are advised to elect also such courses listed above as $\mathrm{S} 9, \mathrm{~S} 11, \mathrm{~S} 15^{\mathrm{b}}, \mathrm{S} 15^{\mathrm{d}}, \mathrm{S} 15^{\text {e }}$, and S28.)

S6f. Social Principles of Secondary Education.-Through a study of the social phases of modern democratic life the course aims to discover principles, points of view, ideals, interests, and methods of procedure of service to secondary school and college teachers and administrators interested in meeting the social and cultural needs of their students. Textbook study, readings, discussions, research, and paper incorporating results of research study. Open only to graduate students, or to seniors who have taught in secondary school. B, II. 3 s.h.-C*, G. Mr. Stowe

S6g. Problems of Secondary Education: Extra-Curricular Activities, Use of Library, Vocational Guidance.-A course dealing with the problems of educating the child through his activities and of helping him find his place in society; also with the problems arising in the personal relationships of high school pupils with teacher and principal and with fellow students. D, $I .3$ s. h.-C*.

S10 ${ }^{\text {b }}$. General Methods for Secondary Schools.-Class-room management and discipline; the teacher's use of the question; the project and how to organize it ; the socialized recitation; supervised study; etc. No student is permitted to enroll in this course who has taken course $\mathrm{S}^{\circ} \mathrm{S}^{\mathrm{b}}$, and every student enrolling must present at least twelve semester-hours of work in education and psychology. $D, I, I I .3 \mathrm{~s} . \mathrm{h} .-C^{*}, G . \quad$ Mr. Trotr

S10 ${ }^{\text {c }}$. Problems in High School and Junior College Teaching.-A brief study of the purposes and objectives of secondary education, followed by assignments in wnich each member of the class endeavors to organize some secondary subject in the light of desirable results in the lives of
pupils. Lectures, readings, discussions. Open only to students who have taught in high school or junior college. $A, I I .3$ s. h.-C*, G. Mr. Stowe (Class enrollment limited to 25.)

S16. High School Administration and Supervision.-A study of outstanding problems. Special investigations and reports. $B, I, I 1.3$ s.h.-C* $G$. Mr. Troth

S18e. Analysis of Study and Study Habits, in the High School Subjects.College freshmen not infrequently fail because they do not know how to study. This course, for high school teachers, consists of a brief survey of the available literature of study, followed by case-work in the habits of high school and undergraduate college students, and a survey of the peculiar learning problems presented by typical secondary school subjects. $A, l .3$ s. h.-C'.

Mr. K. R. Curtis

## COURSES PRIMARILY FOR GRAMMAR-GRADE AND PRIMARY TEACHERS

(These courses are for teachers with two or more years of standard college training. Teachers with less training are advised to take the courses listed under title "North Carolina 'Uniform Curricula' for Elementary Teachers." Primary and grammar-grade teachers who meet prerequisites are advised to consider some work from the courses listed "Primarily for Superintendents, Principals, and Supervisors," and to consider also such subject-matter or cultural courses as Bible $\mathrm{Sl}^{\mathrm{a}}, \mathrm{Sl}^{\text {b }}$; Economics S1a, S2 ${ }^{\text {a }}$, S9 $^{\text {b }}$, S14. S15; English SC2 ${ }^{\text {a }}$, SC2 $^{\text {b }}$, SL2, S30 ${ }^{\text {c }}$ History S9 ${ }^{\text {a }}$, S9 ${ }^{\text {b }}$; and Psychology S1.)

S2A ${ }^{\text {a }}$. Primary Methods in Language and Reading.-A study of materials and methods in the mother-tongue. Not open for enrollment to students who have had credit for course 23 P or 35 P of the North Carolina "Uniform Curricula." $A, I, I I .3$ s.h.-C*.

Miss Michaels
S2A ${ }^{\text {b }}$. Children's Literature.-A critical study of literature for primary grades; types of literature; story telling, principles underlying and practice; study of State Course of Study and adopted texts; bibliographies and use of the library. Not open for enrollment to students who have had credit for course English 74P of the North Carolina "Uniform Curricula." D, $I .3$ s. h.-C*. Miss Michaels

S2B ${ }^{\text {a }}$. Grammar-Grade Methods in Language, Composition, and Reading.-A study of materials and methods in the language subjects of grades four to seven. Not open for enrollment to students who have had credit for course 23G of the Nurth Carolina "Uniform Curricula." A, II. 3 s. h.$C^{*}$.

Mrs. Hawkes
S2 ${ }^{\text {b }}$. Practical Course in Methods.-A course centering around the practice school; fifty hours of observation, weekly conferences, and term papers required; separate sections for primary and grammar-grade teachers. No student may enroll for credit who has already taken a credit course in observation and practice. Schedule to be arranged by each student and the instructors. 2 s.h., $I-C^{*}$.

Mr. Carr, Miss Gray, and Miss Jordan
$\mathbf{S 2}^{\text {c }}$. The American Elementary School.-(a) The responsibility of the elementary school; (b) relation to the junior and senior high schools; (c) sociological ojectives; (d) curriculum values; and (e) classification of elementary pupils. An attempt throughout the session to determine desirable conduct controls and personality outgrowths as a result of (1) the correct presentation of subject matter and (2) the provision of necessary school situations. B, I. 3 s. h.-C*. Mr. K. R. Curtis
$\mathbf{S} \mathbf{2}^{4}$. The Teaching of Arithmetic.-Elementary psychology of arithmetic, place and value of drill, diagnosis of difficulties, remedial measures, place of arithmetic in the elementary school curriculum, etc. A special section for primary teachers the first term. A,I. 3 s.h.-C.

Mr. Johnston
S2A ${ }^{\text {d }}$. The Teaching of Primary Numbers.-A special section of S2 ${ }^{\text {d }}$ for primary teachers. $A, I .3$ s.h.-C.

Miss Sullivan
S2A ${ }^{\text {e }}$. School Hygiene and Health Education: Primary Section.-This course includes two semester-hours of work in general, personal, and school hygiene, with some instruction in anatomy and physiology; cause, transmission, and prevention of communicable diseases; the more common defects of school children; schoolhouse sanitation; medical inspection; etc. An effort is also made to acquaint the student with the technique of health teaching and gives her source of material and assistance in selection and organization of subject-matter. Not open for enrollment to students who have had $\mathrm{S}_{2} \mathrm{~B}^{\mathrm{e}}$ or Physiology 51 X below. $B, I .3$ s.h. $-C$.

Miss Dansdill
S2B ${ }^{\text {e }}$. Physical Education in the Elementary School.-A study of physical education and health work in the elementary school; methods of organization and activities; lectures, discussions, and reports. In addition to the daily recitation period two evening periods weekly in which games suitable for the elementary program will be taught. B,I. 3 s.h.-C.

Mr. Curtis
S2f. The Teaching of Geography.-This study is intended for elementary supervisors and grammar-grade teachers who have at least two years of standard college training. Economics S15 or S1 ${ }^{\text {a }}$ should accompany or precede this course. Organization of subject matter and fundamental aims in geography teaching will be stressed. In the second term, supplementary work in the teaching of history will be included. $D, I, I I$. 3 s.h.-C*.

Mr. Hamilton (first term) Mrs. Hawkes (second term)

S2Af. The Teaching of Primary Geography and Nature Study.-A special section of $\mathrm{S}^{2 \mathrm{f}}$ for primary teachers. $D, I .3 \mathbf{s} . \mathrm{h} .-C^{*}$. Miss Sullivan

S3 ${ }^{2}$. School Organization and Administration for the Classroom Teacher.School and classroom organization and administration as they arise in the work of the classroom teacher. Not open to teachers who have credit for course 24 X of the "Uniform Curricula." D, I. 3 s. h.-C". Mr. Warren

S7. The Technique of Teaching.-An advanced course in the teaching process; the theory underlying sound technique applied specifically to the work of the elementary school. Open to primary and grammar-grade teachers of superior training and experience. $D, I, I I .3$ s.h.-C*, G.

S12A. Curriculum and Materials of the Lrimary Grades.-A study of curriculum problems in grades one to three; underlying principles of largeunit teaching; centers of interest around which units of work may develop; criteria for selection; collection and organization of materials; organization of the curriculum around large units; checking the results against objectives and subject-matter requirements; technique of teaching large units, including the place of drill, the program of work. provision for individuality, and the relationship of the various subjects to the units of work. Individual assignments. $A, I$. $\mathbf{3}$ s.h.-C*.

Miss English
S12B. Curriculum and Materials of the Grammar Grades.-Identical with S12A above, except that illustrative materials are chosen with the child of grades four to seven in mind. B, I. 3 s.h.-C*. Miss English

S34. Problems in Experimental Education.-A study of various educational experiments and experimental schools now under discussion and an analysis of their underlying theories and the general trends of procedure. A, I. 3 s.h.-C*.

Mr. Ellis

## NORTH CAROLINA "UNIFORM CURRICULA" FOR ELEMENTARY TEACHERS

Since many North Carolina teachers are still planning to raise their certificates under the North Carolina curricula that went into effect in 1924, selected courses from these curricula are indicated below. It will be observed that many of the courses carry credit of 3 semester-hours, extended beyond the smaller units of the original curricula. Teachers who have been following the "Uniform Curricula" should pursue the courses in the order listed.

SELECTED COURSES FROM THE SUMMER SCHOOL UNITS OF THE NORTH CAROLINA "UNIFORM CURRICULA"
English 33X. English Composition.-Identical with English SC2a. 2, I, II. 2 s.h. $-C$.

Psychology 41X. Child Study.-Included in Psychology S14n. D, I, II. 3 s.h.-C. Mr. Bates (first term) Miss Dunn (second term)

Physiology 51X. Personal and School Hygiene.-General, personal, and school hygiene with some instruction in anatomy and physiology; cause, transmission, and prevention of communicable diseases; the more common defects of school children; school-house sanitation; medical inspection; etc. $A, I .3$ s.h.-C.

Miss Dansdill

History 52X. American History, 1828-1865.—Included in History S9. $D, I, I I .2$ s.h.-C.

Education 55G. The Teaching of Grammar-Grade Arithmetic.-Included in Education $\mathrm{S} 2^{\text {d }} . A, I .2$ s.h.-C.

Education 56P. Primary Numbers and Projects.-Included in Education S2A ${ }^{\mathrm{d}}$. A, I. 2 s.h.-C.

Education 67P. Primary Curriculum.-The aims and objectives of education in the primary grades; subject matter and school activities; study of the State Course of Study; organization of the primary curriculum; the place of projects and child activities as a basis for organization. For primary teachers. Grammar-grade teachers desiring a similar course should take 66 G below. $A, I .3$ s.h.-C. Mr. Warren

Education 66G. A Study of Grammar-Grade Curriculum.-The aims and objectives of education in the intermediate and grammar grades; pupil activities and experiences for accomplishing these; organization of the grammar grade curriculum; etc. The North Carolina State Course of Study will be used in addition to a text-book. For teachers of the grammar grades. Primary teachers desiring similar work should elect 67P above. $B, I .3$ s.h.-C.

Mr. Hamilton
Geography 72G. The Teaching of Geography.-Type studies of North America, with major emphasis upon the United States, to bring out and illustrate the fundamental principles of good geography teaching. Observation work required. $D, I, I I .3$ s.h.-C.

Mr. Hamilton (first term) Miss Rawl (second term)

Industrial Arts 6IP.-Manipulation and work with clay, textiles, wood, paper, food, printing, etc., intended to give the child an acquaintance with the raw products of nature, and the changes made in them so that they may be more usable for food, clothing, shelter, utensils, tools, etc. Each student taking the course must complete a project based upon the work of the grade in which she expects to teach. D,I,II. Professional credit only, 3 points.

Mrs. Alston (first term)
Drawing 72P, 72G.-A study of color theory, design, perspective, representation, illustration, picture study, etc., through the media of charcoal, water colors, crayons, clay, etc., with a large amount of outside assignment for primary and for grammar-grade teachers. Each student taking the course must complete a project based upon the work of the grade in which she expects to teach. $B, I, I I$. Professional credit only, 3 points.

Mrs. Alston (first term)
Education 73P. History Material for Primary Grades.-A study of history materials for primary grades, with methods of presentation, practice in constructing and telling stories suitable for children from biographies, travel, etc. $B, I I .3$ s.h.-C.

English 74P. Children's Literature.-Included in Education S2A ${ }^{\text {b }}$. D, I. 3 s.h.-C.

Psychology 82X. Educational Psychology.-A study of original nature, individual differences, the learning process, and mental hygiene in their relation to teaching elementary pupils. $A, I I-C$.

Miss Dunn
Writing 82X.-A course combining practice for skill with a study of the educational theory underlying the teaching of handwriting. Schedule to be arranged. I, II-Professional credit only, half course.

Geography 83X. Economic Geography and Types of Industry.-Identical with Economics S15. A,I,II. 3 s.h.-C.

Mr. Landon
Sociology 91X. Social Problems.-An intensive study of several social problems; crime, pauperism, juvenile delinquency; child labor; charities; race problem; immigration; Americanization. Relation of school and teacher to these problems. $B, I, I I$. 3 s.h.-C. Mr. Ormond

Music 92X. Elements of Music and Musical Appreciation.-A continuation of Music 51X. A, I, II-Professional credit only, 3 points.

History 94X. Citizenship.-Identical with Government $\mathrm{S}^{\text {a }}$. D, I, II.
English 96G. English Literature.-This course is included in English SL1. D, I, II. 3 s.h.-C.

Education 98G. Grammar-Grade Methods in Geography and History.-The fundamental purposes in the teaching of geography and history; aims and values; type lessons and organizing subject-matter. D, II. 3 s.h.C.

Mrs. Hawkes

## BIBLICAL LITERATURE

S1 ${ }^{\text {a }}$. Old Testament History and Literature.-This will include a general survey of the Old Testament. A, II. 3 s.h.-C. Mr. Cannon

Si ${ }^{\text {b }}$. New Testament Background and Literature.-The preparation for Christianity by the Hebrew prophets and intertestamental development: a survey of the New Testament. B, II. 3 s.h.-C. Mr. Cannon

## BIOLOGY

[S21 ${ }^{\text {a }}$ and S21 ${ }^{\text {b }}$ below when completed constitute one of the science courses required for graduation. They should be taken together.]

Botany S2I. Introductory Botany.-Equivalent to Botany 1 of the regular term. A general course dealing with plants. Class conferences daily, 1; laboratory daily, 2, 3. I. 4 s.h.-C.

Mr. Ayery and Mir. - (first term) Mr. Jenkins (second term)

Zoö'ogy S21 ${ }^{\text {b }}$. General Zoölogy.-Identical with Zoölogy 1 of the regular term. An elementary survey of the animal kingdom. Lecture and quiz da.ly, 4; laboratary daily, 2:30-4:30. I, 11. 4 s.h.-C.

Mr. Cunningham and Mr.
Botany S4. Plant Physiology.-Laboratory and lectures. Prerequisite. Botany or Zoölogy S21. Lectures daily, 4; labaratary daily, 2:30. I. 3 s.h.-C*, G. Mr. Avery

Zoölogy S19. Research.-Students, who in the judgment of the department are prepared, may carry on investigation of a problem during the summer, and credit will be arranged according to the work done, three hours of laboratory work counting one hour credit. $I, I l-G$.

Mr. Cunningham
Zoölogy S27. Endocrinology.-A study of the structure, physiology, and embryology of the endocrine glands. Students desiring laboratory work in this course should register for S19. 1, I. 2 s.h.-C*, G.

Mr. Cunningham

## CHEMISTRY

Si. General lnorganic Chemistry.-Lectures, recitations, and laboratory work on the elementary principles of chemistry and on the occurrence, preparation, properties, and uses of the elements and their compounds. 8 s.h. Lectures daily, 1; recitatian daily, 4; laboratary haurs to be arranged, $I I-C$.

Mr. R. N. Wilson and Mr. Metler
S2. Qualitative Analysis.-A development of the fundamentals of the ionic theory as applied to analytical reactions with special consideration of the application of the laws of chemical equilibrium and of the modern theories of solution. Lecture or quiz daily, 10:15; labaratory daily, 2:30 ta 5:30. I. 4 s.h.-C.

Mr. Saylor
S3. Quantitative Analysis.-The classroom work includes the general theory of quantitative separations, the calculation of results, and the solution of problems. The laboratory work aims to develop technique and to familiarize the student with representative quantitative methods. Lecture ar quiz daily, 10:15; laboratory daily, 2:30 ta 5:30. II. 4 s.h.C.

Mr. Vosburgh
S5 ${ }^{3}$. Organic Chemistry.-An introduction to the study of the compounds of carbon. Courses 2 and 3 are prerequisite except in special cases. Lecture 1; labaratary every ather day beginning Tucsday afternaon, June 10, 2:30-5:30; quiz eiery other day beginning Wednesday, June 11, third periad. I. 4 s.h.-C. Mr. Hauser and Mr. Gillaspie
$\mathbf{S i}^{\mathbf{b}}$. Organic Chemistry.-A more detailed study is made of subjects such as steroisomerism, substitution in the benzene ring. diazo reactions, etc. Course S5' $^{2}$ prerequisite. Lectures, labaratary, and quizzes as in S5. II. 4 s.h.-C.

Mr. Hauser

## ECONOMICS AND GOVERNMENT

S1 ${ }^{\text {a }}$. Principles of Economics.-A short course in the essential principles of economic science. Students who complete this course satisfactorily may be admitted to Economics 4 and 5 during the college year 1930-31. $B, I .3$ s. h.-C.

Mr. Cotton
S1 ${ }^{\text {b }}$. Economic Problems.-A continuation of $\mathrm{Si}^{\text {a }}$, involving the study of problems. $B, I I .3$ s. h.-C.

Mr. Hoover
S2 ${ }^{\text {a }}$. Elementary Survey of American Government and Politics.-A study of the organization, growth, and practical working of national, state, and local government in the United States; background course for the work of teachers of citizenship in the public schools. $D, I, I I .3$ s. h.-C.

Mr. R. R. Wilson (first term)
Mr. R. S. Rankin (second term)
S7. Accounting.-Elementary principles of single proprietorship, partnership, and corporation accounting. Supervised laboratory periods. $A, B, D, I .6$ s.h.-C.

Mr. Shields
S8 ${ }^{2}$. American Constitutional Law and Theory.-Attention is given to leading constitutional principles of American government, as developed through judicial interpretation. Emphasis is placed upon problems of current importance. Lectures, reading of cases, assigned legal problems. $B, I .3$ s.h. $-C^{*}, G$. Mr. R. R. Wilson

S $9^{\text {b }}$. City and County Government.-A study of the general problems of city government in the United States. The latter part of the course is devoted to a study of county government in the United States, with particular reference to North Carolina. B, II, 3 s. h.-C*, G.

Mr. R. S. Rankin
Sl4 ${ }^{\text {b }}$. Economic Functions of the State.-A consideration of the primary and secondary economic functions of government and of the legislation which provides for the performance of these functions, such as social legislation and the regulation of commerce and industry. $A, I I .3$ s. h.$C^{*}, G$.

Mr. Hoover
S15. Economic Geography and Industrial Organization.-A course based upon the principles of geography and intended to explain how man's industries are determined by his environment. An intensive study of major industries in the United States; the economics of such industries as agriculture, mining, manufacturing, transportation, and banking emphasized. Students may select a specific industry for collateral readings and term papers. $A, I, I I .3$ s.h. $-C$.

Mr. Landon
S54 ${ }^{\text {b }}$. Industrial Relations.-This course deals with the fundamental principles underlying industrial relations. Policies and plans of the management concerning employees are discussed. The class will study the organization of the labor department of various institutions. $A, I$. 3 s. h.-C*, G.

Mr. Cotton

## ENGINEERING

C.E.S. 10. Plane Surveying.-Exercises in use of chain, tape, compass, level, transit, and plane-table; surveys and re-surveys. Three weeks, eight hours a day, beginning May 31. 3 s.h.-C.

Mr. Hall

## ENGLISH

SCl ${ }^{2}$. English Composition.-A course in the fundamentals of English composition, oral and written. When taken in combination with SC1 ${ }^{\text {b }}$ below, it gives credit for required work in freshman English composition. $3, I-C$. Mr. Ward

SCI ${ }^{\text {b }}$. English Composition.-A thorough review of the fundamentals of English grammar with special attention to sentence structure, syntax, common errors, etc. Frequent themes. 1, $I-C$. Mr. Ward

SL1. English Poetry.-The principles of English versification and a general survey of English poetry. D, I, II. 3 s.h.-C.

Mr. A. C. Jordan (first term)
Mr. Peterson (second term)
SC2a. English Composition.-By means of instruction, frequent conferences, and extensive writing of assignments this course undertakes to make the student familiar with the qualities of the best prose style. Open only to those who have credit for $\mathrm{SCl}^{\mathrm{a}}$ and $\mathrm{SCl}^{\mathrm{b}}$. 2, $I, I I-C$. Mr. A. C. Jordan (first term) Mr. Peterson (second term)

SC2 ${ }^{\text {b }}$.English Composition.-Continuation of $\mathrm{SC}^{\mathrm{a}}$; emphasis upon extensive writing in exposition and narration. When completed in combination with SC2 ${ }^{\text {a }}$, this course completes required work in English composition. 3, I, II-C. Mr. A. C. Jordan (first term) Mr. Peterson (second term)

SL2 ${ }^{\text {a }}$. Prose Literature.-Reading and study of selected works of the best writers of prose; lectures on the lives of the authors studied; the periods of literary history; origin and growth of the various types of prose literature, with emphasis upon the novel. With SL2 ${ }^{\text {b }}$ below this course constitutes the regular sophomore course in English literature. $\mathrm{SL}^{\mathrm{a}}$ and $\mathrm{SL}^{\mathrm{b}}$ do not meet the requirements for sophomore English unless a student has credit for sophomore composition or has so creditable a record on freshman composition as to be excused by the English D. partment from Composition 2. D, I. 3 s.h.-C. Mr. Ward

SL2 ${ }^{\text {b }}$. Prose Literature (Continued).-A continuation of English SL2 ${ }^{2}$, with emphasis upon biography. Students may enter SL2 ${ }^{\text {b }}$ without having had SL2á, but may not count it toward a degree until SL2 ${ }^{\text {a }}$ has been completed. $D, I I .3$ s.h.-C.

Mr. Mitchell.
$\mathbf{S 3}^{\text {a }}$. Shakespeare's Comedies. $-A, I I . \quad 3$ s.h. $-C^{*}$.
Mr. Mitchell
S5 ${ }^{\text {a }}$. English Literature, 1798-1832.-This course consists of the study of representative poets of the Romantic Period. $I, B .3$ s.h. $-C^{*}, G$.

Mr. Reed
S5 ${ }^{\text {e }}$. Prose of the Early Nineteenth Century.-A survey of the chief prose writers of the early nineteenth century with special attention to Lamb, Coleridge, Hazl.tt, De Quincey, and the reviewers. A, II. 3 s.h.$C^{*}, G$.

Mr. Mitchell
Mr. Hunter
S6 ${ }^{\text {a }}$. Chaucer.-B, II. 3 s.h.-C* $G$.
Mr. Chase
S19 ${ }^{\text {d }}$. Contemporary Poetry.—B, II. 3 s.h.-C*.
S29 ${ }^{\text {a }}$. The Elizabethan Period.-This course consists of a study of nondramatic Elizabethan literature. I, D. 3 s.h.-C*, G. Mr. Reed

S30 ${ }^{\text {c }}$. Studies in Victorian Literature : Matthew Arnold.-An intensive study of the prose and poetry of Matthew Arnold. A,I. 3 s.h. $-C^{*}, G$.

Mr. Greene
S30 ${ }^{\text {d }}$. Studies in Victorian Literature: The Novelists.-A study of social, pol tical, and industrial conditions as revealed in the work of the chief novelists of the Victorian period. B,I. 3 s.h.-C*, $G$. Mr. Greene

S104. The Development of the American Short Story.-D, II. 3 s.h.-C*.
Mr. Hunter
S304. Seminar in Poe's Contemporaries.-D, II. 3 s.h.-G. Mr. CHASE (Class enrollment limited to 15 .)

Note.-English S19d and S304 are listed tentatively. If both are offered, $\mathrm{S5}^{\mathrm{e}}$ will be withdrawn. If both are withdrawn, $\mathrm{S}^{\mathrm{a}}$ will also be withdrawn and $S 5^{e}$ offered.

## FRENCH

S2 ${ }^{\text {a }}$. Second-Year French.-Reading and translation, alternate exercises in grammar review, verb drill, and writing in French at dictation. B, $I$. 3 s.h.-C. Mr. B. R. Jordan
S2 ${ }^{\text {b }}$. Second-Year French.-Reading and translation, with prose composition. D,I. 3 s.h.-C. Mr. Walton

S211. Survey of Modera French Drama.-A, I. 3 s.h. $-C^{*}, G$.
Mr. B. R. Jordan
S217. Seminar in Balzac.—D, II. 3 s.h.-C*, G.
Mr. Michell (Class enrollment limited to 15.)

S221. Contemporary Drama.-A,II. 3 s.h.—C*, G. Mr. Michell
S222. Nineteenth Century French Poetry.-The transition from Romanticism to Parnassianism and Symbolism. B, I. 3 s.h.-C ${ }^{*}$, G.

Mr. Walton

## GERMAN

S1*. Elementary German.-Grammar, with composition, simple reading, and spoken German. $A, D, I$ (first three weeks). 3 s.h.-C.

Mr. F. E. Wilson
S ${ }^{\text {b }}$. Elementary German.-Grammar, reading, and translation-A, $D, I$ (second three weeks). 3 s.h.-C. Mr. F. E. Wilson
[Auditors desiring to attend $\mathrm{S}^{\mathrm{a}}$ and $\mathrm{S}^{\mathrm{b}}$ without taking credit are not required to pay full registration and tuition but are subject to the auditor's fee of ten dollars.]

S2 ${ }^{\text {a }}$. Second-Year German.-Reading and translation of easy German prose, lyrics, and ballads, with a systematic review of grammar and composition exercises based on the selections read. $A, I I .3$ s.h.-C.

Mr. Krummel
$\mathbf{S} 2^{\text {b }}$. Second-Year German.-Reading and translation of narrative prose, a modern prose comedy, and one of Schiller's blank verse dramas. $D, I I$. 3 s.h.-C.

Mr. Krummel

## HISTORY

S $9^{2}$. American History to 1828 .-A rapid survey of the Colonial and Revolutionary periods followed by a more intensive study of the National period down to the beginning of Jackson's administration. $B, I, I I$. 3 s.h.-C.

Mr. Harmon (first term) Mr. Smith (second term)

S ${ }^{\text {b }}$. American History, 1828-1865.-A study of national expansion, sectional rivalry, railway extension, slavery, political parties, international relations, and the Civil War. D, I, II. 3 s.h.-C.

Mr. Harmon (first term)
Mr. Smith (second term)
S206. The Ante-Bellum South.-This course deals primarily with political and economic conditions, including the development of democracy from the Revolutionary through the Jacksonian Era, the transformation from the frontier to the plantation regime, and the growth of sectionalism. $D, I .3$ s.h.-C*, $G$.

Mr. Abernethy
S222. Renaissance and Reformation.-A course consisting of lectures, reports, and a term paper. It will cover more intensively the history of Europe between 1500 and 1648. B, 11.3 s.h.-C*, G. Mr. Eells

S315. Seminar in Southern History Prior to 1860.-This is primarily a research course. Topics are assigned on various phases of the subject with the object of tracing the expansion of nationalism and democracy, particularly in the Revolutionary Period. $B, I$. 3 s.h. $-G$.

Mr. Abernethy

S322. Seminar in Early Modern History.-A seminar course, open only by permission of the instructor. It will emphasize the Renaissance in Italy and Northern Europe. Research by students and class discussions. D,II. 3 s.h.-G.

Mr. Eells

## LATIN AND ROMAN STUDIES

S215. Roman History.-From the earliest times to the reign of Constantine. Political, social, and religious institutions; the Hellenic infusion and oriental influences; the foundation of the imperial system and its decline; significance of Latin literature. A reading knowledge of Latin, including the preparation equivalent to at least twelve semester-hours of college Latin is prerequisite. Lectures and reports. $A, I .3$ s. h.C*, G.

Mr. Anderson
S216. Latin Syntax.-Study of the fundamental problems in the development and use of the cases, tenses, and modes. Brief introduction dealing with the origin and development of studies in syntax. $B, I$. 3 s. h.-C*, G.

Mr. Anderson

## MATHEMATICS

S1 ${ }^{2}$. College Algebra.-This course will cover the following topics: review of elementary algebra, quadratic equations, properties of quadratics, progressions, variation, logarithms, mathematical induction, binominal theorem, functions, theory of equations, permutations and combinations, determinants. $A, I .3$ s.h.- $C$.

Mr. Miles
S2 ${ }^{\text {² }}$. Plane and Spherical Trigonometry.-Trigonometrical formulas; solution of special problems. B, I. 3 s.h.-C. Mr. Elliott
$\mathbf{S} \mathbf{2}^{\text {b }}$. Analytic Geometry.-The definitions, equations, and properties of the straight iine and conic sections in rectangular coördinates; parametric equations of loci, tangents, normals, etc., and transformations of coordinates; the general equation of the second degree. $A, I I .3$ s.h.-C*. Mr. Patterson

S3 ${ }^{2}$. Differential Calculus.-D, I. 3 s.h.-C*.
Mr. W. W. Rankin
$\mathbf{S 3}^{\text {b }}$. Integral Calculus. $-D, I I . \quad 3$ s.h. $-C^{*}$.
Mr. Patterson
S4. Theory of Equations and Determinants.-B, $I I .3$ s.h.- $C^{*}$, $G$.
Mr. Miles
S6. Differential Equations.-A study of the more common types of ordinary differential equations with emphasis on geometrical interpretations and applications to geometry and physics. Prerequisite, course S3. D, I. 3 s.h.-C*, G.

Mr. Miles
S250. Modern Geometry.-Modern geometry of the triangle, transversals, harmonic sections, harmonic properties of the circle, inversions, poles, polars, etc. Valuable to teachers of high school geometry. Prerequisite, courses $2,3^{\text {a }}$. B, I. 3 s.h.- $C^{*}, G$.

Mr. W. W. Rankin

S15. Probability, Introductory Course.-Combinatory analysis, mean values, Bernoulli's theorem, the probability integral, statistics. This course should be preceded by Mathematics $3^{\text {b }}$. A, II. 3 s.h. $-C^{*}, G$.

Mr. Miles
S25*. Integral Equations.-A study of the Volterra and Fredholm integral equations with special reference to their application to the boundary value problem of differential equations. Prerequisite, course 5. $A, I$. 3 s.h.-G.

Mr. Elliott
S25 ${ }^{\text {b }}$. Integral Equations (Continued).-Schedule to be arranged for the first three weeks of the second term. 3 s.h.-G. Mr. Elliott

## PHYSICS

S1. Preliminary Physics.-Lectures, recitations and individual laboratory work covering the fundamental phenomena of physics, a course substantially equivalent to the Physics 1 of the winter term. Two lectures, one recitation, and one laboratory period daily. 1; schedule to be arranged. 8 s.h.-C. Mr. Hatley, Mr. Callifan, and Mr. Stephens

## PSYCHOLOGY

S1. Introduction to General Psychology: General Priaciples.-Lectures, demonstrations, prescribed readings, and reports. $B, I .3$ s.h.-C.

Mr. Bates
S10. Social Psychology.-Lectures, readings, and reports. B, I. 3 s.h. -C*, G. Mr. Estabroons

S14 ${ }^{\text {a }}$. Child Psychology.-The outstanding characteristics of children of the primary and grammar-school ages; a course intended primarily for primary and grammar-grade teachers. Text-book, discussions, and exercises. $D, I .3$ s.h. $-C$.

Mr. Bates
S14 ${ }^{\text {e }}$ General Psychclogy for Teachers.-A study of original nature, individual differences, the learning process, etc.; a survey of the principles of general psychology peculiarly applicable to the work of the teacher. $A, I$.

Mr. Bates
S19. Genetic Psychology.-A study of the behavior and mental processes of the child from the comparative and developmental points of view. Lectures, assigned reading, reports. D, I. 3 s.h.-C*, $G$.

Mr. Estabrooks

## RELIGION: CHURCH HISTORY

SR2 ${ }^{\text {b }}$. Rise of the Denominations.-Beginning with the Lutheran Reformation, this course traces the rise, growth, influence, and history to 1800 of the Calvinistic, Anglican, Reformed, Quaker, Baptist. and Methodist movements. $A, I .3$ s. h. $-C^{*}, G$.

Mr. Garber

SR4 ${ }^{2}$. Methodism.-A study of the beginnings and growth of the Methodist societies in England, of early Methodism in America, and of the development of the several branches of the Methodist Church in America. Prerequisite, Church History SR2. B, I. 3 s. h.-C*, $G$.

Mr. Garber

## RELIGIOUS EDUCATION

S2 ${ }^{\text {a }}$. Curriculum of Religious Education.-Study of various theories of the curriculum of religious education, conception of the curriculum as enriched and controlled experience, analysis of existing curricula and critical evaluation of same. Prerequisite: at least twelve semester-hours of education or religious education. B, 3 . 3 s.h.-C*, G. Mr. Spence

S3 ${ }^{\text {b }}$. Materials of Character Education.-A study of the Bible and other great religious literature for their contributions to character formation at each given stage of development. Special emphasis on story material and modern religious poetry. Prerequisite: at least twelve semesterhours of education or religious education. $D, I .3$ s.h. $-C^{*}, G$.

Mr. Spence

## SPANISH

SI ${ }^{\text {a }}$. Elementary Spanish.-Pronunciation, grammar, conversation, and reading of easy prose. $B, I .3$ s.h.-C. Mr. Steinhauser

SI ${ }^{\text {b }}$. Elementary Spanish.-Pronunciation, grammar, conversation, and reading of easy prose. $D, I .3$ s.h.-C. Mr. Steinhauser
$\mathbf{S} 2^{\text {a }}$. Second-Year Spanish.-Thorough review of grammar, with exercises in composition, conversation, and dictation. $A, 11.3$ s.h.-C.

Mr. Lister
$\mathbf{S} \mathbf{2}^{\text {b }}$. Second-Year Spanish.-Reading and translation; exercises in conversation and dictation. $D, I I .3 \mathbf{s}$. h. $-C . \quad$ Mr. Lister
JUNALUSKA SUMMER SCHOOL, Inc.(Affliated with Duke University)Lake Junaluska, N. C.
INSTRUCTORS
BENJAMIN GUY CHILDS,(Duke University),
A.B., A.M., University of Virginia; University of Virginia, 1920-22;DirectorEducation, Sociology.
HUGO LEANDER BLOMQUIST,
(Duke University),
B.S., The University of Chicago; Pasteur Institute, 1919; Ph.D., University of Chicago;Biology and Hygiene
WILLIAM IVEY CRANFORD,(Duke University),A.B., Duke; Ph.D., Yale;Psychology.
ROBERT TAYLOE DUNSTAN,(Greensboro College for Women),A.B., Duke; A.M., Ph.D., University of Wisconsin;Spanish.
BELLE CURRIN GHOLSON,(Durham High School),
A.B., A.M., Duke;
Education.
QUINTON HOLTON,
(Head of Department of History, Durham High School),
A.B., Duke; The University of Chicago, 1921-23;History.
ALLISON W. HONEYCUTT,(Superintendent Hendersonville City Schools),
A.B., Wake Forest; Graduate Study, Columbia University;
Education.

EDWIN RAY HUNTER, (Maryville Collcge), A.B., Maryville College; M.A., Ph.D., The University of Chicago; English.

## WILLIAM CHARLES McCALL, <br> (University of South Carolina),

A.B., A.M., University of South Carolina; The University of Chicago, 1926-27; Education.

EDNA MORGENTHALER (Elementary Supervisor, High Point City Schools), A.B., University of Nebraska; A.M., Columbia;

Primary Education.
HIRAM EARL MYERS, (Duke University), A.B., Duke; S.T.B., S.T.M., Boston University; Biblical Literature.

WILLIAM AMOS ABRAMS, (Glen Alpine High School), A.B., A.M., Duke;

English.
WILBERT ARMONDE JENKINS, (Fellow in Biology, Cornell University),
A.B., A.M., Duke; Cornell, 1929-30;

Assistant in Biology.
WILLIAM LEROY MacGOWAN,
(Head Department of Biology, Robert E. Lee Senior High School, Jacksonville, Fla.),
A.B., Ha:vard University;

Assistant in Biology.
ISABEL MARTIN,
(East Tennessee Teachers College), A.B., Duke;

Education and Drawing.
ROSA WARREN MYERS,
Southern Conservatory of Music; American Conservatory of Music;
Public School Music.

ELMER WILLIAMS SYDNOR, (Carson-Nezoman College),<br>A.B., The University of Richmond; A.M., Columbia University; Duke University, 1929.30;<br>English.

## BUSINESS MANAGER

JAMES R. BOYD,
Waynesville, North Carolina.

## CALENDAR

The Junaluska Summer School, Inc., will open June 10 and will close July 19. Recitations will be held five days in the week, all Mondays except June 30 and July 14 being holidays. Friday, July 4, will be observed as Independence Day.

## REGISTRATION

Saturday, June 7, is reserved for the registration of students from Haywood County. Tuesday, June 10, is registration day for all other students. This day, between the hours of 9 A.M. and 5 P.M., will be allowed for students to matriculate, select courses, and make arrangements concerning board and lodging. Regular classes will meet at $8: 15$, Wednesday morning, and recitation work will begin at once. Students are advised against late entrance since this very seriously affects school work as well as credits that may be obtained.

## ADMISSION

All applicants for admission must have completed a high school course. As evidence of this, a teacher's certificate of grade as high as North Carolina State elementary will be accepted from teachers with two or more years of experience. Certificates of high school graduation and other credentials should be submitted to the Director at the time of registration.

## COURSES OFFERED

Professional courses are offered for teachers in elementary schools, teachers of primary grades and of grammar grades, and teachers of high school subjects.

For qualified college students, including high school graduates who may wish to begin their college course in the summer instead of waiting until September, instruction will be offered in economics, education, English, Biblical literature, biology, history, Spanish, psychology, and sociology. Credit is allowed toward the A.B. degree at Duke University for these courses, and credit towards the A.M. degree is allowed for the course in field botany. Professional credit towards the raising or renewal of a North Carolina teacher's certificate will be allowed for the successful completion of courses in drawing and physical education.

## COURSE IN FIELD BOTANY

A special course in field botany will be offered to public school teachers of nature study, high school teachers of botany and biology, and to qualified college students. The course is unique in that it will consist of a careful survey of the plant life found in the mountains of western North Carolina. Frequent excursions and field trips will be made to Mount Mitchell, Mount Pisgah, the famous Pink Beds, and other sections abundant in unusual flora. A considerable amount of time will be spent in the new Great Smoky Mountain National Park area.

High school teachers and elementary school teachers of botany and related subjects will find ample opportunity for extensive study in this attractive field with either undergraduate or graduate credit.

## ROOM AND BOARD

The hotels and lodging places on the Southern Assembly Grounds at Lake Junaluska have guaranteed summer school students board and room at the special rate of $\$ 10.00$ per week. with bed-linen furnished. Room and board will be provided at the same rate in the Mission Building, the Summer School headquarters, for a limited number of early applicants. Further information relative to board and room may be obtained by addressing J. R. Boyd, Business Manager, Waynesville, North Carolina, or R. E. Nollner, The Southern Assembly, Lake Junaluska, N. C.

## FEES AND EXPENSES

Tuition charge for college students other than teachers is $\$ 10.00$. Teachers are exempt from tuition. The registration fee, paid by every student, is $\$ 20.00$. Expenses may therefore be estimated as follows:
Registration ..... $\$ 20.00$
Room and Board ..... 60.00
Library and Recreation ..... 2.00
\$82.00
To this should be added about $\$ 5.00$ for books and probably $\$ 5.00$ for miscellaneous expenses, besides the tuition charge for students other than teachers. A laboratory fee of $\$ 2.50$ will be charged students taking courses in biology.

# COURSES OF INSTRUCTION* 

## EDUCATION

$\mathbf{S 2}{ }^{\text {c }}$. The American Elementary School.-(a) The responsibility of the elementary school; (b) relation to the junior and senior high schools; (c) sociological objectives; (d) curriculum values; and (e) classification of elementary pupils. An attempt throughout the session to determine desirable conduct controls and personality outgrowths as a result of (1) the correct presentation of subject matter and (2) the provision of necessary school situations. Daily, first period.

Mr. Honeycutt

S28. General Course in Methods.-This course is intended for elementary teachers. It deals with the theory and practice of the teaching process. Daily, first period.

Miss Morgenthaler
S5 ${ }^{\text {a }}$. Introduction to Educational Sociology.-Principles of sociology necessary to an understanding of the school as a social institution; a consideration of such topics as social forces, social processes, and social problems; particular emphasis upon the study of the school as a coördinating and correlating agency in society. (Identical with Sociology S5..) Daily, second period.

Mr. Childs
S6 ${ }^{\text {d }}$. High School Administration and Supervision.-Intended for principals and teachers. The principles of secondary education applied to the solution of practical problems of the high school. Special investigations, readings, and reports. Daily, fourth period. Mr. Childs

S8 ${ }^{\text {b }}$. Educational Tests and Measurements.-Study of standardized tests and scales with emphasis on their service in the improvement of instruction. Daily, second period.

Mr. McCall
S10 ${ }^{\text {b }}$. General Methods for Secondary Schools.-Class-room management and discipline; the teacher's use of the question ; the project and how to organize it ; the socialized recitation; supervised study; etc. Daily, first period.

Mr. McCall
SI4 ${ }^{\text {b }}$. Psychology of Adolescence.-Characteristics of children of juniorand senior-high school age; the change of most educational significance in this transition period. Intended for high school teachers. Daily, fifth period. Mr. Cranford

## NORTH CAROLINA "UNIFORM CURRICULA" FOR ELEMENTARY TEACHERS-SUMMER SCHOOL UNITS 3 -5-SELECTED courses

English 33X. English Composition.-The most advanced course in English composition required of elementary teachers; emphasis upon the

[^6]power of the student to collect material and organize ideas and effectively express them in narration, description, and exposition; review of paragraphing, use of words, etc. Daily, second period.

Mr. Abrams
Psychology 4IX. Child Study.—The development of the child in mental, moral and social nature; influence of heredity and environment; meaning of infancy; innate tendencies and capacities; etc. Daily. first period. Mr. Cranford

History 41X. American History.-A survey of the colonial and revolutionary periods, followed by more intensive study of the early constitutional period. Credit, 3 semester-hours. Daily, first and second periods. Mr. Holton

Physiology 5IX. Personal and School Hygiene.-General, personal, and school hygiene; cause, transmission, and prevention of communicable diseases; more common defects of school children; etc. Daily, third period.

Mr. Blomquist
History 52X. American History (Continued).-A continuation of 41X. The Jacksonian democracy, national expansion, sectional rivalry, railway extension, slavery, political problems, international relations, and the Civil War. Texts, readings, and reports. Credit, 3 semester-hours. Daily, fourth and fifth periods.

Mr. Holton
Education 56P. Primary Numbers and Projects.-The psychology of arithmetic; development of the number concept in the primary grades; place of drill; projects as a basis for formal number work. Daily, fifth period.

Miss Morgenthaler

## IRREGULAR UNIT IN BIOLOGY

(This unit should be taken immediately after Unit 4 or Unit 5.)
Biology 4IX (General Biology), 62X (Plants), 73X (Animals).-An introductory course intended as a foundation for the study of psychology, physiology, botany, zoölogy, etc. The treatment of plants attempts two things: (1) through the study of types to acquaint the student with the morphology and physiology and reproduction in plants, from the one cell to seed plants, (2) through field work to acquaint the student with as much common and local flora as possible. This part of the course is intended to serve as a foundation for the teaching of nature study and elementary science. The treatment of the part of the course dealing with animals is similar in aim and method to the treatment of the part dealing with plants. Daily, lecture fourth period; laboratory schedule to be arranged. Credit, 8 semester-hours, constituting a complete unit.

Mr. Jenkins and Mr. MacGowan

## SUMMER SCHOOL UNITS 6-9-SELECTED COURSES

(Recommended for teachers holding the Elementary A certificate.)
Education 67P. Primary Curriculum.-The aims and objectives of education in the primary grades; subject matter and school activities necessary to obtain these aims and objectives; study of the State Course of Study; organization of the primary curriculum; the place of projects and child activities. A course for primary teachers. Grammar-grade teachers desiring a similar course should take 66G below. Daily, fourth period.

Mr. Honeycutt
Education 66G. A Study of the Grammar Grade Curriculum.-The aims and objectives of education in the intermediate and grammar grades, pupil activities and experiences for accomplishing these, organization of the grammar grade curriculum, etc. The North Carolina State Course of Study will be used in addition to a text-book on the elementary school curriculum. For teachers of the grammar grades. Primary teachers desiring similar work should elect 67P above. Daily, third period.

Mr. Honeycutt
Geography 62P. Primary Geography and Nature Study.-The function, aim, and place of geography and nature study in the primary curriculum. Consideration of such content as primitive life and occupations; observational effects of weather changes and climate on nature and life; certain physiographic changes and features which can be observed and appreciated; some acquaintance with the out-of-doors, common birds, butterflies, insects, animals, trees, flowers, etc.; methods of teaching such material. Use will be made of the State Course of Study, text-books in geography and nature study, and professional books on these subjects. Daily, second period.

Miss Martin
English 74P. Children's Literature.-A critical study of literature for primary grades; types of literature; Mother Goose, nonsense and fairy tales, fables, myths, legends, nature stories, poetry, etc.; story telling, principles underlying and practice; bibliographies and use of the library. Daily, first period.

Miss Martin
Geography 72G. The Teaching of Geography.-Type studies of North America, with major emphasis upon the United States, to bring out and illustrate the fundamental principles of good geography teaching. Observation work required. Daily, first period. Mrs. Gholson

Drawing 72P. Drawing for Primary Grades.-This course considers the topics introduced in course 31 X with special reference to the work of the primary grades. Daily, fifth period. Professional credit only, half course.

Miss Martin
Drawing 72G. Drawing for Grammar Grades.-This course considers the topics introduced in course 31X with special reference to the work of the grammar grades. Daily, fifth period. Professional credit only, half course.

Miss Martin

Education 73P. History Material for Primary Grades.-The aim of this course is to give the student a source of history material for primary grades, together with methods of presentation. Practice will be given in constructing and telling stories suitable for children from biographies, travel, etc. Daily, third period.

Miss Morgenthaler
Psychology 82X. Educational Psychology.-A study of original nature. individual differences, the learning process, and mental hygiene in their relation to teaching the elementary school subjects. Daily, third period.

Mr. Cranford
Geography 83X. Types of Industry.-Identical with Economics S15b. A study of the major industries in the United States; the economics of such industries as agriculture, mining, manufacturing, transportation, and banking emphasized. Daily, fourth period.

Mrs. Gholson
Religious Education 91X. The Use of the Bible in Public Schools.-A survey of the present situation in Religious Education as related to the public school system, followed by a discussion of various methods of religious instruction, closing with the presentation of practical examples of $\mathrm{Bib}-$ lical material suitable for public school use. Daily, third period.

Mr. Myers
Sociology 91X. Social Problems.-An intensive study of several social problems; crime, pauperism, juvenile delinquency; child labor; feeblemindedness; charities, race problem; immigration; Americanization. Relation of the school and teacher to these problems. Daily, fifth period.

Mr. McCall
History 94X. Citizenship.-A study of the organization, growth, and practical workings of national, state, and local government in the United States. The course is intended to serve as a background for the work of teachers of citizenship courses in the public schools. Daily, second period.

Mrs. Gholson
English 96G. English Poetry.-Identical with SL1. Credit, 3 semesterhours. Daily, fourth and fifth periods.

Mr. Abrams
Music 92G. Musical Appreciation for Grammar Grades.-This course will discuss such topics as the need for musical appreciation; sources of the enjoyment of music; rhythm, melody, song; correlation of music with other arts and common school subjects. Daily, third period. Professional credit only, half course.

Mrs. Myers

## BIBLICAL LITERATURE

S11. Leaders in Early Hebrew History.-The study begins with Moses and continues through the period of the United Kingdom. Daily, second period.

S13. Leaders in Judaism.-This course begins with the Exile and continues to the Roman period, considering the literature and principal characters. Daily, fourth period.

Mr. Myers
(Students who have credit for Bible 1 at Duke University may enter S11, S13, or Religious Education 91X. Students who have not had Bible may be admitted by permission of the instructor to take these three courses as a substitute for Bible 1.)

## BIOLOGY

S7. Hygiene.-Problems of community and personal hygiene with especial reference to teachers and schools. Daily, third period.

Mr. Blomeuist
S21. General Biology.-Daily lectures, laboratory work, and quizzes. A content course for high school teachers as well as one of the science courses required for college graduation. Lectures daily, fourth period. Credit, 8 semester-hours.

Mr. Jenkins and Mr. MacGowan
S25. Field Botany.-The aim of this course is to present to the students a first-hand knowledge of plants in their native habitats. The field work will be done in the mountain areas of Western North Carolina and will include the Pisgah Forest and Smoky Mountain sections. The course will consist of practice in the identification of plants in the field and a study of their natural history and associations. Field trips daily, also lectures, readings, reports, etc. Credit, 4 semester-hours for A.B. or A.M. degree. Hours to be arranged.

Mr. Blomquist

## ENGLISH

SLI. English Poetry.-The principles of English versification and general survey of English poetry. Identical with 96 G of the "Uniform Curricula." Credit, 3 semester-hours. Daily, fourth and fifth periods.

Mr. Abrams
SC2 ${ }^{2}$. English Composition.-By means of instruction, frequent conference, and extensive writing of assignments this course undertakes to make the student familiar with the qualities of the best prose style. Open only to those who have credit for $\mathrm{SCl}^{*}$ and $\mathrm{SCl}^{\text {b }}$, or its equivalent. Daily, second period.

Mr. Abrams
SC2 ${ }^{\text {b }}$. English Composition.-Continuation of SC2 ${ }^{\text {a }}$; emphasis upon extensive writing in exposition and narration. When completed in combination with $\mathrm{SC}^{\mathrm{a}}$, this course completes required work in English composition. Daily, first period.

Mr. Abrams
SL2 ${ }^{2}$. Prose Literature.-Reading and study of selected works of the best writers of prose; lectures on the lives of the authors studied; the periods of literary history; origin and growth of the various types of prose literature, with emphasis upon the novel. Credit, 3 semester-hours. Daily, fourth and fifth periods.

Mr. Sydnor

S3 ${ }^{2}$. Shakespeare's Comedies.-Intensive study of two of the comedies and careful reading of others. Credit, 3 semester-hours. Second and third periods.

Mr. Hunter
S4e. American Literature for Elementary Teachers.-A selection from the American literature taught in the last three grades of grammar school, and a study of this material and its background. Credit, 3 semesterhours. Daily, first and second periods. Mr. Sydnor

S104. The Development of the American Short Story.-Credit, 3 semesterhours. Fourth and fifth periods. Mr. Hunter

## HISTORY

S9". American History to 1829.-A survey of the Colonial and Revolutionary periods followed by more intensive study of the Constitutional period down to the beginning of Jackson's administration. A course designed to meet the needs of elementary teachers. Credit, 3 semesterhours. Daily, first and second periods.

Mr. Holton
S $9^{\text {b }}$. American History, 1830-1865.-A study of national expansion, sectional rivalry, slavery, political parties, international relations, and the Civil War. Text, lectures, readings, and reports. Credit, 3 semesterhours. Daily, fourth and fifth periods.

Mr. Holton

## PSYCHOLOGY

S14. Child Psychology.-The outstanding characteristics of children of the primary and grammar-school ages; their bodily growth and development and its sensitiveness to their environment; their characteristic ways of knowing, feeling, and acting; and the best methods and materials for stimulating and guiding development. Text-book, discussions, and exercises. Daily, first period.

Mr. Cranford
S14 ${ }^{\text {b }}$. Psychology of Adolescence.-The characteristics of the youth of high school age that are of interest and importance to teachers of high school students. This course is intended primarily for them. Text-book, discussions, and exercises. Daily, fifth period.

Mr. Cranford
S14. General Psychology for Teachers.-A survey of the principles of general psychology that are peculiarly applicable to the practical work of the teacher. Daily, third period.

Mr. Cranford

## SOCIOLOGY

S5. Introduction to Educational Sociology.-A study of social forces, processes, and values as affecting education, and the interaction of school and community. Daily, second period.

Mr. Childs
S5 ${ }^{\circ}$. Social Problems.-This course will concern itself with social principles and problems. It will make an intensive study of such problems as dependency, delinquency, and defectiveness; charities and corrections. Daily, fifth period.

Mr. McCall

## SPANISH

S2 ${ }^{\text {a }}$. Second-Year Spanish.-Thorough review of grammar, with exercises in composition, conversation, and dictation. Credit, 3 semesterhours. Daily, first and second periods. Mr. Dunstan
$\mathbf{S} \mathbf{2}^{\text {b }}$. Second-Year Spanish.-Reading and translation; exercises in conversation and dictation. Credit, 3 semester-hours. Daily, second and third periods. Mr. Dunstan

## RESERVATION IN ADVANCE

Students should enroll as promptly as possible. Application for reservation may be made by sending the enclosed application blank properly filled in to B. G. Childs, Director, Duke University, Durham, N. C. A part payment of $\$ 5.00$ on the registration fee should be enclosed with the application ; checks should be made to J. R. Boyd, Business Manager.

Announcement

# JUNALUSKA SCHOOL OF RELIGION 

Lake Junaluska, N. C.
INSTRUCTORS
ELBERT RUSSELL, A.B., A.M., Ph.D.
Dean of the School of Religion and Professor of Biblical Interpretation. Duke University.

WILLIAM CLAYTON BOWER, A.M. Professor of Religious Education, The University of Chicago.

BENNETT HARVIE BRANSCOMB, A.B., B.A., M.A. (Oxon.), Professor of Nezv Testament, Duke University.

SYLVANUS MILNE DUVALL, A.B., Ph.D., Professor of Religious Education. Scarritt College

FRANKLIN SIMPSON HICKMAN, A.B., A.M., S.T.B., Ph.D. Professor of the Psychology of Religion and Homiletics, Duke University.

SAMUEL GUY INMAN, A.B., A.M., LL.D., Executive Secretary Committee on Coöperation in Latin America, New York.

GILBERT THEODORE ROWE, A.B., D.D., Litt.D.<br>Professor of Christian Doctrine, Duke University.

## CALENDAR: SCOPE OF WORK

The third session of the Junaluska School of Religion will be held at Lake Junaluska, North Carolina, from July 21 to August 30, 1930. It will be conducted under the joint management of Duke University and the General Sunday School Board with the coöperation of the Board of Missions and other boards of the Church. The purpose is to conduct a summer
school of religion which shall meet the growing demand for advanced study in the Bible, Theology, Religious Education, Missions, and allied subjects.

There will be two classes of students, those who are graduates of high schools and who may have had one or more years in college, and those who are graduates of colleges. The school is open to men and women. The credits secured for work done will be Duke University credits, and will count toward the A.B. and B.D. degrees and for the preliminary work toward the A.M. degree in the School of Religion.

The School is designed for pastors, church workers, missionaries, and students who desire to fit themselves the better for their work or to add credits looking toward the securing of university degrees.

## COURSES

Courses will be offered meeting five times a week with eighty-minute periods. Each course, satisfactorily completed, will receive a credit of three semester-hours in Duke University. Two such courses may be taken by each student. The courses offered are divided into two groups. The first group consists of courses for college undergraduates who are graduates of high schools and who desire credits looking toward the A.B. degree. The second group consists of courses for college graduates who desire credits looking toward the B.D. degree. These courses may also be taken by college undergraduates who have completed the junior year and are ranked as incoming seniors in college.

## GROUP I

FOR COLLFGE UNDERGRADUATES
Course 1. The Teachings of Jesus.-A study of Jesus' teaching in the light of the religious and ethical ideas of his day.

Professor Branscomb
Course 3. Old Testament History.-A survey of the history of the He brews in its relation to contemporary oriental history, with special emphasis on the literature and religious institutions. Professor Russell

Course 5. The Evangelical Movement as a Factor in Social Reconstruction in Latin America.-Survey of present social and religious conditions, the church and the community, religious education program, literature problem, relations between national and foreign workers and between Protestants and Catholics, movements for coöperation and unity.

## GROUP II

## FOR COLLEGE GRADUATES <br> (AND FOR COLLEGE SENIORS)

Course 2. The Religious Ideas of Paul.-Religious and ethical teachings of the Apostle Paul and their significance for the life of today. Special attention is given to the religious and philosophic movements of Paul's day.

Professor Branscomb
Course 4. The Social Teachings of the Old Testament.-A survey of the social teachings of the Old Testament, with special reference to their value in modern life. Professor Russell

Course 6. Religious Education in the Modern Church.-The educational function of the church; the objectives of religious education; the church organized for religious education; an adequate leadership; the content and method of religious education; religious education through social participation; the scientific method in religious education; religious education in its relationship to the total educational process; religious education and public education; religious education as a creative process.

Professor Bower
Course 3. Practicum in Religious Education.-The analysis of problems in teaching religion. The course will be based upon the practical experience of the members of the group in the actual conduct of religious education. The process as conducted will be analyzed and criticized. Changes in the direction of improvement will be projected in terms of practical steps to be undertaken. Each student is expected to undertake a specific project.

Professor Bower
Course 10. Educational Psychology.-Consideration will be given to the psychological basis of conduct; the nature of motive; the nature and laws of learning and especially to those phases of psychology which are of greatest significance for character formation and spiritual growth.

Professor Duvall
Course 12. Introduction to the Science of Theology.-A consideration of theology as a branch of science and an indication of some of the results obtained through the use of the scientific method in theological investigation.

Professor Rowe.
Course 14. Introduction to the Psychology of Religion.-Study of the major factors of religious experience, together with the conditions bearing upon its genesis and growth.

Professor Hickman
Course 16. Sermon Construction.-A study of problems in sermon construction and points of psychological contact between the preacher and his congregation. The class work will involve a critical analysis of selected sermons with written reports.

Professor Hickman

Course 18. Christianity and World Movements.-A survey of present world movements building a better world: international political organization, including the League of Nations, World Court, Pan American Union, international law, arbitration; international social, labor, health and student movements; international missionary program, recent conferences at Jerusalem and Havana, relations between younger and older churches, opportunities for foreign service. Professor Inman

## ADDITIONAL INFORMATION

A general matriculation fee of $\$ 5.00$ is due at time of registration and a special fee of $\$ 5.00$ in each course for which the student registers.

Students are of course responsible for their own arrangements for board and room. Those desiring to engage room and board in the Sunday School Dormitory should write A. S. Dietrich, 810 Broadway, Nashville, Tennessee. Those desiring to room elsewhere should write to Ralph E. Nollner, Lake Junaluska, North Carolina.

All the sessions of the school will be held in the Sunday School Building at the west end of Lake Junaluska.

Academic matters will be in charge of the faculty of the School of Religion, Elbert Russell, Dean.

Those desiring further information concerning courses and conditions of work should address John Q. Schisler, General Sunday School Board, 810 Broadway, Nashville, Tennessee, or Paul N. Garber, Registrar, School of Religion, Duke University, Durham, North Carolina.

# BULLETIN <br> OF <br> Duke University 

## UNDERGRADUATE INSTRUCTION

 (Trinity College and the Woman's College)

1929-1930
ANNOUNCEMENTS FOR 1930-1931

PUBLISHED BY DUKE UNIVERSITY
IN JANUARY, FEBRUARY, MARCH, APRIL, MAY, JUNE, AND OCTOBER
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UNDER ACT OF AUGUST 24, 1912

## ANNUAL CATALOGUES AND BULLETINS

For general catalogue of Duke University apply to The Secretary, Duke University, Durham, N. C.

For catalogue on Undergraduate Instruction, apply to The Secretary, Duke University, Durham, N. C.

For catalogue on The Graduate School of Arts and Sciences, apply to The Dean of the Graduate School, Duke University, Durham, N. C.

For bulletin on The School of Religion, apply to The School of Religion, Duke University, Durham, N. C.

For bulletin on The Department of Engineering, apply to The Secretary, Duke University, Durham, N. C.

For bulletin on The Summer Schools, apply to The Director of the Summer Schools, Duke University, Durham, N. C.

For bulletin of The School of Medicine, apply to The Dean of the School of Medicine, Duke University, Durham, N. C.

# Duke University 



UNDERGRADUATE INSTRUCTION<br>(Trinity College and the Woman's College)

## 1929-1930

ANNOUNCEMENTS FOR 1930-1931

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## UNIVERSITY CALENDAR

1930

| June |  | Saturday-Registration of local students for Summer School, first term. |
| :---: | :---: | :---: |
| June | 9. | Monday-Registration of students for Summer School, first term. |
| June | 10. | Tuesday-Instruction begins for Summer School, first term. |
| July | 4. | Friday-Independence Day-A holiday. |
| July | 18-19. | Friday, Saturday-Final Examinations for Summer School, first term. |
| July | 21. | Monday-Instruction begins for Summer School, second term. |
| Aug. | 27-28. | Wednesday, Thursday-Final Examinations for Summer School, second term. |
| Sept. | 17. | Wednesday, 9 A.m.-Assembly for all Freshmen. Freshmen orientation program begins. 10 A.m.-Entrance examinations for students not admitted by certificate. |
| Sept. | 20. | Saturday, 4 р.м.-First regular faculty meeting of the academic year. |
| Sept. | 22. | Monday-Freshmen instruction begins. |
| Sept. | 23. | Tuesday-Registration and matriculation of new students with advanced standing. |
| Sept. | 24. | Wednesday-Formal opening of college. Registration of matriculated students. |
| Sept. | 25. | Thursday-Recitations for Sophomores, Juniors, and Seniors begin. |
| Sept. | 25-26-27. | Thursday, 9 A.m. to 1 p.м., $2: 30$ p.m. to 4 p.m., Friday, 9 A.m. to 1 p.m., 2:30 p.m. to 5 p.m., Saturday, 9 A.m. to 1 P.M.-Registration of graduate students. |
| Nov. | 11. | Tuesday-Armistice Day-Part holiday-Public exercises. |
| Nov. | 19-22. | Wednesday, Thursday, Friday, and Saturday-Midsemester examinations. |
| Nov. | 27. | Thursday-Thanksgiving Day-A holiday. |
| Dec. | 11. | Thursday-Duke University Day-Not a holiday. |
| Dec. | 22. | Monday, 1 p.m.-Christmas recess begins. |
| 1931 |  |  |
| Jan. | 3. | Saturday, 8:30 A.m.-Instruction is resumed. |
| Jan. | 21. | Wednesday-Mid-year examinations begin. |

Jan. 31. Saturday-Last day for matriculation for second semester.

Feb.
Feb.
Feb. 23. Monday-A holiday-Civic Celebration in honor of Washington's birthday.
Mar. 25-28. Wednesday, Thursday, Friday, and Saturday-Midsemester examinations.
Apr. 1. Wednesday-Last day for submitting orations for Wiley Gray Contest.
Apr.
Apr.
2. Thursday, 4 P.m.-Easter recess begins.

May
7. Tuesday, 8:30 A.m.-Instruction is resumed.

1. Friday-Last day for selection of courses for ensuing year.
May
June
2. Thursday-Final examinations begin.
3. Sunday-President's address to graduating class.

June
June
June
June
June

June
June 10. Wednesday morning-Commencement address; graduating exercises.
June 10. Wednesday afternoon at sunset-Lowering of the Flag by the graduating class.

## 1930



## 1931


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## BOARD OF TRUSTEES

## OFFICERS



## EXECUTIVE COMMITTEE

| F. Bruton, ex-offic | Wilson, | N. C. |
| :---: | :---: | :---: |
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| C. W. Toms............... | .New York, | N. Y. |
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## OFFICERS



MEMBERS OF THE BOARD

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Eva Candler Malone, A.B. Assistant in Cataloguing Department

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Note: The list is arranged in two groups. The first contains the professors, associate professors, and assistant professors. The second comprises the instructors. The order of the names in each group, with the exception of the President, is that of seniority.

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406 Buchanan Boulevard
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Walter Samuel Lockhart, A.B., LL.B. Forest Hills
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Hope Valley
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James Cannon, III, A.B., A.M., Th.B., Th.M.
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$\dagger$ Karl Bachman Patterson, A.B., A.M. 1024 Monmouth Ave. Assistant Professor of Mathematies

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$\dagger$ Hugo Leander Blomquist, B.S., Ph.D. 2118 Englewood Ave. Professor of Botany
$\ddagger$ Allan H. Gilbert, B.A., A.M., Ph.D. 1302 Vickers Ave. Professor of English
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Fred Soule Aldridge, A.B., A.M. Duke University Campus Assistant Professor of Mathematics

Paull Franklin Baum, A.B., A.M., Ph.D. 103 Faculty Apartments Professor of English
$\dagger$ Jesse Marvin Ormond, A.B., B.D. 301 Watts St. Professor of Biblical Literature and Sociology

[^7]*Arthur Marcus Proctor, A.B., A.M. Professor of Education
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George Merritt Robison, A.B., M.A., Ph.D. Assistant Professor of Mathematics
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Faculty Club

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*Walter McKinley Nielsen, B.S., Ph.D. 11 Aycock Apartments Assistant Professor of Physics

[^8]James DeHart
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Hiram Earl Myers, A.B., S.T.B., S.T.M.
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William Walter Rankin, Jr., B.E., M.A. Professor of Mathematics
J. Fred Rippy, A.B., A.M., Ph.D.

Professor of History
Elbert Russell, A.B., A.M., Ph.D. Professor of Biblical Interpretation
Clement Vollmer, A.B., A.M., Ph.D. 303 Faculty Apartments Professor of German
John Winder Carr, Jr., A.B., A.M., Ph.D. 602 Buchanan Boulevard Associate Professor of Education
Gyfford Davidson Collins, A.B., A.M. 2011 University Drive Assistant Professor of Phy'sics
F. Gregory Hall, A.B., A.M., Ph.D. 1011 Dacian Ave. Professor of Zoölogy
$\dagger$ Franklin P. Johnson, A.B., A.M., Ph.D. Faculty Apartments Assistant Professor of Greek

Charles E. Landon, A.B., A.M., Ph.D.
903 Sixth St. Assistant Professor of Economics and Economic Geography
Frank Kirby Mitchell, A.B., A.M.
214 Swift Ave. Associate Professor of English

Ernest Wililam Nelson, A.B., A.M., Ph.D. Hope Valley Assistant Professor of History

Edward M. Cameron, A.B. Manchester Apartments Assistant Director of Plysical Education
W. E. Tilson, LL.B. Assistant Director of Physical Education

Allen Howard Godbey, A.B., Ph.D. Professor of Old Testament

Harold Crusius Bird, Ph.B., C.E. 2415 Club Boulevard Professor of Civil Engineering
-William McDougall, M.A., D.Sc., Litt.D.
Professor of Psychology

[^9]Marshall Turner Spears, A.B., A.M. 501 Watts St. Assistant Professor of Law
Wilburt Cornell Davison, A.B., B.A., B.Sc., A.M., M.D.
Professor of Pediatrics
Hope Valley

- Franklin Simpson Hickman, A.B., A.M., S.T.B., Ph.D.

Professor of Psychology of Religion
Jay Broadus Hubbell, A.B., A.M., Ph.D. Professor of English
Thaddeus Dilliard Bryson 2404 Club Boulevard Professor of Lazu

Brady R. Jordan, Litt.B., Ph.D. 2409 Club Boulevard Professor of Romance Languages

Samuel Raymond Schealer, E.E., M.S. Hope Valley Professor of Electrical Engineering

William Bryan Bolich, A.B., M.A., B.C.L. 302 Faculty Apartments Professor of Laze
*Earl Jefferson Hamilton, B.S., A.M., Ph.D. 113 Faculty Apartments Professor of Economics

Robert Stanley Rankin, A.B., M.A., Ph.D. 1007 W. Trinity Ave. Associate Professor of Political Science

Frederick Adolphus Wolf, A.B., A.M., Ph.D. 807 Second St. Professor of Botany

George Sherman Avery, Jr., B.S., M.S., Ph.D. 510 Buchanan Boulevard Assistant Professor of Botany

James Foster Barnes, A.B., A.M. Dormitory No. 2 Director of Social and Religious Activities
*Walter Kirkland Greene, A.B., A.M., Ph.D. 314 W. Trinity Ave. Professor of English
Dwight Lucian Hopkins, B.S., M.S., Ph.D. 306 Faculty Apartments Assistant Professor of Zoölogy
Gilbert Theodore Rowe, A.B., D.D., Litt.D. 212 Watts St. Professor of Christian Doctrine
Luther Mason Dimmitt, A.B., Th.M., M.A. 1522 Hermitage Court Assistant Professor of Education
-Joseph Banks Rhine, B.S., M.S., Ph.D.
Assistant Professor of Psychology and Philosophy
Warren Chase Vosburgh, B.S., M.S., Ph.D. 2315 Englewood Ave.
Assistant Professor of Chemistry

* Absent on leave, 1929-30.
-Karl Edward Zener, A.B., A.M., Ph.D. 303 Swift Ave. Assistant Professor of Psychology
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Edward Roy Cecil Miles, B.S., M.A., Ph.D. 118 Faculty Apartments Assistant Professor of Mathematics
Walter Albert Stanbury, A.B., D.D. 516 W. Chapel Hill St. Professor of Practical Theology
Charles Manning Child, Ph.B., M.S., Ph.D. 114 Faculty Apartments Visiting Professor of Zoölogy
George Thomas Hargitt, Ph.B., A.M., Ph.D. 114 Faculty Apartments Visiting Professor of Zoölogy
Loring Baker Walton, Lic. èt L. 2411 Club Boulevard Assistant Professor of Romance Languages
Andrew Runni Anderson, A.B., Ph.D. 2413 Club Boulevard Professor of Latin
Lucius Aurelius Bigelow, S.B., Ph.D. Assistant Professor of Chemistry
Lewis Chase, A.B., A.M., Ph.D. Professor of English
Edward Rutilerford Gray, A.B., M.A. 101 Faculty Apartments Assistant Professor of Economics
Christopher Roberts, B.S., A.M., Ph.D. Assistant Professor of Economics
Dennis Clayton Troth, B.Ed., A.M., Ph.D. Visiting Professor of Education
Charles Abram Ellwood, Ph.B., Ph.D., LL.D. Professor of Sociology
Justin Miller, A.B., J.D., LL.B. Professor of Law

Frederick Edward Steinhauser, A.B., A.M. Instructor in Romance Languages
Dean Moxley Arnold, B.S., A.M. Instructor in Mathematics
Herbert James Herring, A.B., A.M. Instructor in Debating
Archibald Currie Jordan, A.B., A.M. Instructor in English
William Maxwell Blackburn, A.B., B.A. 303 Swift Ave. Instructor in English

Lewis Patton, A.B. 206 Swift Ave. Instructor in English

John Herman Shields, A.B., A.M. 1007 W. Trinity Ave. Instructor in Accounting
Mary Hendren Vance, A.B., A.M. Instructor in English
*Shelby Thomas McCloy, A.B., M.A., B.A., B.Litt Instructor in History

George MacKendrick Gregory, A.B., A.M. 909 N. Gregson St. Instructor in English
Ruth Slack Smith, A.B., A.M.
Southgate Hall Instructor in Education

Lambert Armour Shears, A.B., A.M., Ph.D. 917 Green St. Instructor in German

John Tate Lanning, A.B., A.M., Ph.D. Instructor in History

Charles Eugene Ward, A.B., A.M. Instructor in English

Richard Anderson Harvill, B.S., A.M. Instructor in Economics

Benjamin Ulysses Ratchford, A.B., A.M. Instructor in Economics

John Henry Saylor, A.B., A.M. Instructor in Chemistry

Warren Candler Sledd, A.B., A.M. Instructor in Latin

Vivian Moize Assistant in Physical Education
Willis Harvey Bell, B.S. Instructor in Botany
Lenox D. Baker Assistant Director of Physical Education
Furman Anderson Bridgers, A.B., A.M. Instructor in Romance Languages
David Williams Carpenter, A.B., M.A. 708 Buchanan Boulevard Instructor in Physics
John Wesley Coombs
Assistant Director of Physical Education

[^10]Francis George Dressel, B.S., M.S.
911 Monmouth Ave.
Instructor in Mathematics
Charles Roy Hauser, B.S., M.S., Ph.D.
6 Vance Apartments
Instructor in Chemistry
Charlton Coney Jernigan, A.B., A.M. Instructor in Greek

Lawrence Calvin Little, A.B., A.M. Instructor in Religious Education
Alan Krebs Manchester, A.B., A.M. Instructor in History
Raymond Willard Root, A.B., A.M. Instructor in Zoölogy
Harold A. Schomer, B.S., M.S.
1002 Monmouth Ave.

819 Sixth St.

Dormitory No. 1

205 Watts St.

918 Urban Ave. Instructor in Botany
Bessie Whitted Spence, A.B., A.M., B.D. Instructor in Biblical Literature

Herbert Wilfrid Sugden, A.B., A.M. Instructor in English
Marie Anne White, A.B., A.M. Instructor in English
Robert Hilliard Woody, Ph.B., A.M. Instructor in History
James Nardin Truesdale, A.B., A.M.
Instructor in Greek

## UNIVERSITY FELLOWS

Ashburn, Karl Everett Economics Dormitory No. 1
A.B., A.M. Texas Christian University

Brecher, Gerhard Karl Botany Dormitory No. 1
Adolf Otto
Gymnasium, Dresden ; University of Hamburg, Germany
Doob, Leonard William Psychology Dormitory No. 1
A.B. Dartmouth College

Fennell, Richard A. Zoölogy Dormitory No. 1
A.B. Birmingham-Southern College

Ford, Grover Mancil Chemistry Dormitory No. 1
B.S. Davidson College, M.S. Emory University

Hagan, Charles Banner Political Science Dormitory No. 1
A.B. Emory and Henry College, A.M. University of Virginia

Jenkins, Sanford Swindell Chemistry 809 Second St.
A.B., A.M. Duke University

Mabry, William Alexander History Dormitory No. 1
A.B., A.M. Duke University, A.M. Harvard University

| Major, Charles Leslie <br> A.B., A.M. William and M | Education College | 814 Sixth St. |
| :---: | :---: | :---: |
| Metler, Alvin Velbert B.S. Adrian College | Chemistry | 1120 W. Main St. |
| Pace, Donald Metcalf <br> B.S. Susquehanna University | Zoölogy <br> A.M. Duk | ormitory No. 1 sity |
| Parks, E. Taylor <br> A.B. Carson-Newman Colle | History <br> e, A.M. Un | Dormitory No. 1 of Tennessee |
| Patterson, John Clarke A.B., A.M. University of T | History exas | Dormitory No. 1 |
| Root, Raymond Willard A.B. Milton College, A.M. | Zoölogy ke Univers | 205 Watts St. |
| Sharkey, William Kenneth A.B. DePauw University, | Economics <br> I. Brown | 317 Second ty |
| Smith, Culver Haywood A.B. Duke University, A.M | History Yale Unive | Box 452, D. U. |
| Smith, Robert Sidney A.B., A.M. Amherst College | Economics | Box 754, D. U. |
| Stephens, Hubert Wesley B.S. Illinois Wesleyan Colleg | Physics | Dormitory No. |
| Stokes, Ruth Wyckliffe B.A. Winthrop College, M.A | Mathemati <br> Vanderbilt | 12 Glenn Apts. rsity |
| Sugden, Herbert Wilfred A.B. Harvard University, A | English <br> . Duke U | 201 Faculty Apts. |
| Sydnor, Elmer Williams A.B. Richmond College, A. | English <br> . Columbia | 1012 Gloria Ave. ersity |
| Tipton, Samuel Ridley <br> A.B. Mercer University | Zoölogy | Dormitory No. 1 |
| Westerhof, Anthony Cornelius A.B. Calvin College, A.M. D | Psychology Duke Universi | Dormitory No. 1 |

## INDUSTRIAL RESEARCH FELLOWS

## (Liggett and Myers Foundation)

Darkis, Frederick Randolph Chemistry 506 Buchanan Blvd. B.S., M.S., Ph.D. University of Maryland

Hall, Joseph Alfred Chemistry 1118 N. Duke St. B.A., M.S. University of Wisconsin

Jones, Edwin Patterson Chemistry 619 S. Duke St. A.B., A.M. Duke University, Ph.D. Yale University

Powell, Gamaliel Wyatte Holmes Chemistry 1801 Lakewood Ave. B.S., M.S. Emory University

Powell, Thomas Edward Zoollogy Elon College, N. C. B.A. Eloal College, M.A. University of North Carolina

## GRADUATE ASSISTANTS

Anderson, Ewing English Dormitory No. 1 A.B. University of Florida, A.M. Duke University

Basler, Roy Prentice English 214 Faculty Apts. A.B. Central College, Missouri

Blake, Nelson Morehouse History Dormitory No. 1
A.B. George Washington College, A.M. Duke University

Bolich, Lilian Harrison Chemistry 302 Faculty Apts. A.B. Hollins College, A.M., Ph.D. Columbia University

Braswell, John William English Dormitory No. 3 A.B. Duke University

Brewer, Anne Eliza French Meredith College A.B. Meredith College, A.M. Columbia University

Burch, James Charlie Horton English 316 N. Elizabeth St. A.B., A.M. Duke University

Callihan, Alfred Dixon Physics Dormitory No. 1
A.B. Marshall College

Chesley, Leon Carey Zoölogy Dormitory No. 1
B.S. Susquehanna University

Clark, Thomas Dionysius History 119 Jarvis
A.B. University of Mississippi, A.M. University of Kentuclyy

Cox, Henry Miot Mathematics Faculty Apts.
B.S. Emory University

Davidson, Elizabeth Huey History 12 Glenn Apts. B.S., M.S. University of Tennessee

Elmore, Kelly Lee Chemistry 115 Faculty Apts. A.B. Duke University

Gillaspie, Athey Graves Chemistry Dormitory No. 1
B.S. Lynchburg College

Godard, James McFate Education Dormitory No. 1 A.B. Park College

Jackson, David Kelly, Jr. English Dormitory No. 1 A.B. Duke University

Little, Lawrence Calvin Religion 819 Sixth St. A.B. Davidson, A.M. Duke University

McCulloch, Thomas Logan Psychology Dormitory No. 1

A.B. Whittier College

McMillan, Montague English 264 Faculty Apts.
A.B. Limestone College, A.M. George Washington College

Pettigrew, Richard Campbell English Dormitory No. 1
A.B. Furman University, A.M. University of North Carolina

Priepke, Rudolf Julius Chemistry Dormitory No. 1
B.S. Elmhurst College

Schallert, Dorothy Amaryllys Zoölogy 606 Buchanan Blvd.
A.B., A.M. Duke University

Seay, Hibernia French 702 Buchanan Blvd.
A.B. Randolph-Macon College

Simpson, William Hays Political Science Dormitory No. 1
A.B. Tusculum College, A.M. Duke University

Snuggs, Henry Lawrence English 1018 Gloria Ave.
A.B. Wake Forest College, A.M. Duke University

Trentham, Shannon Otis Botany 814 Second St.
B.S. Carson-Newman College

Trueblood, Paul Graham English Dormitory No. 1
A.B. Willamette College

Whitman, William Tate Accounting Box 606, D. U.
A.B. Duke University

Williams, Harold Fish Botany 909 Gregson St.
Ph.B. University of Wisconsin

## GRADUATE SCHOLARS

Balch, Clifford Perry
History
Dormitory No. 1
A.B. Franklin and Marshall College

Chen, William Yuanlung Psychology Dormitory No. 1
A.B., A.M. Syracuse University
deBruyne, Jacob Marinus Anton Chemistry 1023 Monmouth Ave.
A.B. Duke University

Dunkle, Margaret Robert Latin 702 Buchanan Blvd.
A.B. Florida State College for Women

Fry, Glenn Ansel Psychology Dormitory No. 1
A.B. Davidson College

Gathings, James Anderson
Political Science Dormitory No. 1
A.B. Furman University

Gillock, Emmie May Mathematics 1030 W. Trinity Ave.
A.B. Mississippi State College for Women

Griffin, Mabel Jeannette Mathematics 1211 Carolina Ave. A.B. Duke University

McCaskill, Leona Wilson Latin 806 Third St. A.B. Winthrop College

McEwen, Noble Ralph Education Dormitory No. 1
A.B. Birmingham-Southern University

Miller, Paul Jones, Jr. Political Science 2306 Twelfth St.
B.S. Mississippi A. \& M. College

Pritchett, William Kendrick Greek Dormitory No. 1
A.B. Davidson College

Underwood, Eugene Taylor French Dormitory No. 1 A.B. Butler University

## GENERAL STATEMENT

Duke University offers in Trinity College and the Woman's College two academic degrees for undergraduate work, bachelor of arts and bachelor of science in civil or electrical engineering. Six groups of studies lead to the degree of bachelor of arts. These groups are designated by Roman numerals in the order in which they are described. For a description of these groups see the section below in this catalogue under the topic, "Groups of Studies for the Degree of Bachelor of Arts."

For a description of the groups of studies leading to the degree of bachelor of science see the section below in this catalogue under the topic, "Groups of Studies for the Degree of Bachelor of Science in Civil or Electrical Engineering."

## ADMISSION TO COLLEGE

## GENERAL REGULATIONS

Applicants able to submit certificates of proficiency in subjects accepted for admission to the freshman class from schools whose work has been approved by the University will be admitted without examination, provided these certificates are properly made out on the regular blank provided by the University, signed by the school principal, and presented before or at the opening of the academic year. The applicant must have completed the course of the school from which he comes. Unless admitted on certificate, every candidate for admission will be examined on the required subjects.

Entrance examinations for the admission of new students will be held on the dates announced in the calendar of the University. All students applying for admission must appear before the Committee on Admission on Wednesday, September 17. Wednesday, September 17, Thursday, September 18, Friday, September 19, and Saturday, September 20, will be devoted to the registration, sectioning, and classification of new students. The first part of this period is devoted to placement tests and to qualifying examinations in English, mathematics, and foreign languages for all Freshmen. Students whose certificates have not been accepted take entrance examinations at this time.

New students with advanced standing from other institutions are requested to appear before the Committee on Admission, Tuesday, September 23. Students who register and matriculate later than the dates named in the University calendar must pay the Treasurer five dollars for the privilege.

It is strongly recommended to parents and guardians that all applicants for admission to Duke University be successfully vaccinated against smallpox and typhoid fever before they enter.

## REQUIREMENTS FOR ADMISSION

The requirements for admission are defined in terms of units. A unit of credit is allowed for a subject of study pursued throughout an academic year at an accredited high school,
if the course has demanded five recitations a week and the prescribed amount of work has been satisfactorily completed. Credit for fifteen units is required for admission to all groups.

The subjects in which credit for admission to the University may be offered and the maximum amount of credit acceptable in each subject are given in the following table:

| UNITS | UNITS |
| :---: | :---: |
| English .......................................... 4 | Botany .......................................... 1 |
| Latin ............................................. 4 | Zoölogy ......................................... 1 |
| Greek ............................................ 3 | General Biology |
| German ......................................... 3 | Physical Geography .................... 1 |
| French ......................................... 3 | General Science ............................ 1 |
| Spanish ....................................... 3 | Agriculture .................................. 2 |
| Mathematics ................................. 4 | Mechanical Drawing .................. 2 |
| History and Civics ...................... 4 | Woodwork, Forging, and |
| Physics ........................................ 1 | Machine Work .......................... 2 |
| Chemistry .................................... 1 | Household Economics $\qquad$ 2 <br> Commercial Subjects $\qquad$ 3 |

Minimum entrance credits of three units in English, one in history, three in mathematics, and four in foreign languages (either all in Latin or two in each of any two of the foreign languages accepted for admission, including Latin) are required of all applicants for candidacy for the bachelor of arts degree. However, in case the fifteen units of credit for admission do not include the full requirements in foreign languages. the student is given an opportunity during his freshman year to make up the deficiency.

## DEFINITION OF REQUIREMENTS

## History-One Unit

The candidate may offer for credit one unit from any of the following subjects. The examination will be based on material similar to that included in the books suggested. In lieu of the textbooks named, candidates may be examined on material contained in any of the courses in history and civics suggested for high schools by the North Carolina Department of Public Instruction.
(a) Ancient History (one unit).

Webster's Ancient History, West's Ancient World, Wolfson's Essentials in Ancient History.
(b) Medieval and Modern History (one unit).

Harding's New Medieval and Modern History, Robinson's Western Europe, West's Modern World.
(c) English History (one unit).

Cheyney's Short History of England, Coman and Kendall's History of England, Larson's Short History of England, Walker's Essentials in English History.
(d) American History (one unit).

Ashley's American History, Channing's A Student's History of the United States, Hart's Essentials of American History, James and Sanford's American History, McLaughlin's History of the American Nation, Muzzey's American History.

## English-Three Units <br> Grammar and Composition

The requirements in grammar and composition are a thorough knowledge of the essentials of English grammar, habitual correctness in spelling, punctuation, sentence structure, paragraphing, and ability to make unified and coherent outlines and to write accurately and clearly on familiar subjects.

## Literature

The classics to be studied in preparation for college English are divided into two classes, those intended for thorough study and those intended for general reading. Preparation in the former class should cover subject-matter and the leading facts in those periods of English literary history to which the prescribed books belong; in the latter class it should consist of a general knowledge of the subject matter and of the lives of the authors. In exceptional cases an equivalent amount of reading and study in other than prescribed works will be accepted.

Special attention is called to the minimum essential program as printed in the Manual of Study issued by the North Carolina Department of Public Instruction.

## Mathematics-Three Units

1. College Algebra.
(a) To Quadratics (one unit).
(b) Quadratics to, and including, Progressions (one unit).
2. Plane Geometry (one unit).

## Latin-Two or Four Units

1. Grammar and Composition (one unit).
2. Four Books of Casar's Gallic Wars (one unit).
3. Six Orations of Cicero (one unit).
4. Six Books of Vergil's Eineid (one unit).

The student must be able to convert simple English prose into Latin.

The Roman system of pronunciation is used exclusively in the Latin work of the college course, and applicants for admission are expected to be well drilled in it.

> Greek-Two Units

1. Elementary Grammar and Composition (one unit).
2. Xenophon's Anabasis, Books I-IV (one unit).

## French-Two Units

During the first year the work should comprise: (1) Elementary grammar and at least 100 to 150 pages of approved reading; (2) grammar completed and 200 to 300 pages of approved reading.

During the second year the work should comprise: (1) a thorough review of the grammar work of the previous year and a study of the irregular verbs and of the uses of the subjunctive mood; (2) grammatical exercises and easy paraphrasing of parts of texts read; (3) the reading of from 200 to 300 pages of easy modern prose.

## German-Two Units

During the first year the work should comprise: (1) Elementary grammar and at least 75 or 100 pages of approved reading; (2) elementary grammar completed and at least 150 to 200 pages of approved reading.

The second year's work should include the reading of from 150 to 200 pages of literature in the form of easy stories and plays; (2) easy paraphrasing of parts of the texts read; (3) continued drill in the rudiments of grammar.

## Spanish-Two Units

The work for the first year should comprise: (1) Elementary grammar and at least 100 to 150 pages of approved reading; (2) grammar completed and 200 to 300 pages of approved reading.

During the second year the work should include: (1) a thorough review of the grammar-work of the previous year and a study of the irregular verbs and of the use of the subjunctive mood; (2) grammatical exercises and easy paraphrasing of parts of texts read; (3) the reading of from 200 to 300 pages of easy modern prose.

## ELECTIVE SUBJECTS FOR ENTRANCE CREDITS

A candidate may offer additional entrance credit from the following subjects:

## English

Students who have completed four years of English in an approved school will receive credit for one unit in addition to the three units required for admission to the freshman class.

## History and Civics

In addition to the unit required, a candidate may present credit from the subjects which he has not offered as required entrance in history or civics.

## Greek

Homer's Iliad, I-III, with prosody and sight translation, may be offered as elective credit for one unit.

## Latin

One or two units of work in any of the four subjects in Latin named above under the sub-topic, "Latin," under the topic, "Definition of Requirements," may be offered for elective credit. Students presenting two units of Latin as one of the foreign languages required for entrance may present an additional elective unit in Latin.

## French

A year's work in French done according to the method outlined on p. 30, may be offered for an elective credit of one unit. In addition to the two years of work in French, a student may present for an elective unit a third year's work done in an approved manner.

## German

A year's work in German done according to the methods outlined on p. 30, may be offered for an elective credit of one unit. In addition to the two years of work in German, a student may present for an elective unit a third year's work done in an approved manner.

## Spanish

A year's work in Spanish done according to the methods outlined on p. 31, may be offered for an elective credit of one unit. In addition to the two years of work in Spanish, a student may present for an elective unit a third year's work done in an approved manner.

## Mathematics

One-half unit credit each is allowed for Solid Geometry and Plane Trigonometry.

## Physics

Credit for one elective unit will be allowed for a year's work in elementary physics consisting of (1) recitations based on such texts as Cahart and Chute's, High School Physics; Millikan and Gale's, First Course in Physics, or Mann and Twiss's, Physics, with adequate lecture-table experiments by the instructor ; (2) at least thirty experiments worked out by students individually in the laboratory, of which a neat report is made in proper form (the number of experiments performed is not so important as the quality of work done) ; (3) lectures and recitations on the practical application of the principles studied to the community life and to the home.

## Chemistry

A year's work in chemistry conducted according to the same method suggested for that in physics will be accepted for an elective unit of credit.

## Biology

An elective credit of one unit is allowed for a year's work in any of the following biological sciences:

General Biology.-One year of study by the laboratory method devoted to typical animals and plants, covering the facts of morphology and physiology. Such a text as Hunter's, $A$ Civic Biology, is recommended. Candidates for admission must present satisfactory laboratory notebooks.

Botany.-A year of work based on such a text as Bergen and Caldwell's High School Botany'. Candidates for admission must present satisfactory notebooks.

Zoölogy.-A year of work based upon such a text as Linville and Kelley's, Introduction to Zoölogy. Candidates for admission must present satisfactory notebooks.

## Mechanical Draiwing

Elective credits of two units may be offered in mechanical drawing. Each year's work must be satisfactory in both quantity and quality. Drawing-books or plates must be submitted by all candidates offering this subject.

## Physical Geography

The year's work in physical geography may be offered as one unit ; it should be based on a modern text-book and should include an approved laboratory and field-course of at least forty exercises performed by the student.

## Agriculture and Household Economics

Maximum elective credits of two units may be offered in either agriculture or household economics by graduates of approved schools in which the teaching in these subjects has met the requirements of the North Carolina Department of Public Instruction.

## Woodworking, Forging, and Machine Work

Graduates of approved schools offering thorough courses for one or two years in woodwork, forging, and machine work will be given credit of one unit for each year of such work certified by the school authorities.

## Commercial Subjects

Graduates of approved schools offering thorough instruction in such commercial subjects as bookkeeping, stenography, and commercial arithmetic, may offer these subjects for credit for admission. Not more than three elective units of credit will be allowed for commercial subjects.

## General Science

A full year's work in general science done in a high school of approved standing will be accepted for one unit of elective credit.

## SPECIAL STUDENTS

Students of mature age not fully prepared to enter the freshman class may be admitted as special students. Such students are required to pass the regular entrance examinations in the subjects they propose to take, and all are required to present for admission English, history, and mathematics. They are required also to take fifteen hours of recitation work a week.

## ACCREDITED SCHOOLS

A list of accredited schools is revised from year to year. An applicant for admission to the freshman class who brings from one of these schools a certificate of graduation properly made out and signed by the principal is given credit for the work certified and is admitted to college without examination. Blank forms for recording the work done will be sent on request. Every applicant for admission by certificate is advised to secure a blank, have it properly filled out, signed, and forwarded to the Committee on Admission as early as possible.

## ADMISSION TO ADVANCED STANDING

Applicants for admission to advanced standing in the University must present official certificates of all work done in other institutions of approved standing; otherwise they must stand written examinations on all work for which they are seeking credit. Further, a minimum of one full year in residence at Duke University with the satisfactory completion of at least thirty semester-hours of approved senior work is required of all candidates for the bachelor's degree.

## REQUIREMENTS FOR THE DEGREE OF BACHELOR OF ARTS

The requirements for the degree of bachelor of arts are designed to give students such training in certain fundamental subjects as is essential for intelligent, educated citizens and at the same time to provide for them the opportunity for as wide an election as possible of courses of study interesting and practically helpful to them because congenial to vocations they plan later to pursue. The requirements for the degree are reckoned in semester-hours, a semester-hour being credit given for passing a subject pursued one hour a week during a semester. Credit for one hundred andtwenty-six semester-hours, exclusive of physical education, is required for the degree of bachelor of arts in all groups.

The faculty has arranged the six groups of studies given below for the guidance of students in electing the work required for graduation. A student is free to elect any group he may desire, but in each group there is a large amount of work prescribed that in the judgment of the faculty is necessary to prevent a too great scattering of the efforts of the student while giving him a well-balanced course and work likely to be of special value to him in his chosen vocation. Some of the work in each group is left entirely to the choice of the student. With the approval of the Dean of the College and of the Council on Instruction, a student may at any time transfer from one group to another. In case of such a transfer, any prescribed work done in one group that is not prescribed in the other shall count as general elective credit in the group to which the transfer is made, and the student transferring shall make up as soon as possible the work prescribed in the group he has chosen.

No student is allowed to enroll in any semester for more than the equivalent of nineteen semester-hours of work, exclusive of physical education. No course-card is valid until it has the approval of the Council on Instruction and of the Dean of the College. All students, when electing courses are urged to seek the advice of the members of the faculty in whose departments they expect to receive instruction.

Not more than one course of six or eight semester-hours of credit in final fulfillment of the requirements for the degree of bachelor of arts in Duke University may be done in another institution of approved standing, and this course must first be approved for such credit by the head of the department concerned and by the Dean of the College.

# GROUPS OF STUDIES FOR THE DEGREE OF BACHELOR OF ARTS 

## GROUP I

## General

This group is based on the traditional requirements for the degree of bachelor of arts. Students who elect it are required to take twelve semester-hours of English, including six of composition and six of literature; eighteen of foreign language, of which not more than six may be in a course beginning the study of a language, and this course must be followed by a second course in the same language; sixteen of biology, chemistry, or physics, including eight each in any two of the three sciences; six of Bible; six of mathematics; six of economics; six of history; and elective work sufficient to complete the one hundred and twenty-six semester-hours required for graduation. The eighteen semester-hours of foreign language required in this group must include two of the languages: Greek, Latin, French, German, and Spanish, and the two languages may not both be taken in the same department.

In addition to the seventy semester-hours of work already specified as required in this group, a student electing it is further required to take thirty semester-hours, (thirty-two se-mester-hours if an elementary science is one of the courses), in some subject chosen as a major and in other subjects specifically approved by the head of the department in which the major subject is chosen. A major may be chosen in any department in the University provided the head of the department approves it. The twenty-four or twenty-six semester-hours, as the case may be, required for graduation in addition to the seventy semester-hours of required work and the thirty or thirty-two semester-hours of major-minor work are left as free electives. A student may take as free electives any courses in which he is interested, provided he is qualified for admission to them.

The following arrangement of work is recommended to students in this group:

| Freshman Year | Sophomore Year |
| :---: | :---: |
| s.H. | S.H. |
| English | English .............................. 6 |
| Mathematics ...................... 6 | Foreign Language ............. 6 or 12 |
| Bible ................................. 0 or 6 | Bible ................................. 6 or 0 |
| Foreign Language ............. 12 or 6 | Science or History ........... 8 or 6 |
| History or Science ............. $\frac{6 \text { or } 8}{30 \text { or } 32}$ | A required course in Foreign Language, Science, or Economics $\qquad$ 6 or 8 |
| Junior Year |  |
| Required courses in Foreign Language, Science, or Economics $\quad 6$ or 14 | Senior Year 30 or 32 Electives restricted only by |
| Electives ............................. 24 or 18 | e general requirements |
| 30 or 32 |  |
|  | 30 or 3 |

A student should observe the following points in arranging his work for the freshman and sophomore years in this group: (1) If he presents as many as three college entrance units in one foreign language, he has the option of continuing that language in college or of discontinuing it; if he presents only two units in any foreign language, he must continue that language in college unless granted permission to discontinue it by the Committee on Admission. He is not permitted to include more than one course of six semester-hours beginning the study of a language among the eighteen semester-hours of required language work, and that course must be followed by a second course in the same language. (2) The required work in language may not all be taken in the same department. (3) The six semester-hours of required work in Bible must be taken in either the freshman or sophomore year. (4) A student must take one of the required elementary sciences, biology, chemistry, or physics, in either the freshman or sophomore year and the second required science not later than the junior year. If he postpones his first natural science to the sophomore year, he may take history in the freshman year and must then take Economics 1 or Economics 102 in his junior year. If he takes natural science and no history in the freshman year, he must, in his sophomore year, take either history or economics and in the junior year the one not taken the year before.

## GROUP II

## Business Administration

This group is designed for students who enter college with the purpose of engaging in some form of business activity after graduation. The required work consists of twelve semesterhours of English, including six semester-hours of composition and six of literature; six of Bible ; eight of biology, chemistry, or physics; six of history; six of mathematics; twelve of foreign language, of which not more than six semester-hours may be a course beginning the study of a language: forty-eight of economics and political science; and six of law. Twenty-two semester-hours are left for free electives.

The following arrangement of courses is authorized for students electing this group:


## GROUP III

## Religion

This group is designed for students who enter college with the purpose of adopting the ministry or other religious or social welfare work as a vocation after graduation. The required work consists of twelve semester-hours of English, including
six of composition and six of literature ; eight of biology ; eight of chemistry or physics; six of history, six of economics or political science; twelve of foreign language, of which not more than six may be a course beginning the study of a language; six of mathematics; six of Bible; six of psychology; six of philosophy; and twenty-four of work in the Department of Religion other than Bible 1-2. There are twenty-six semesterhours of free electives.

The following arrangement of courses is authorized for students electing this group:

| Freshman Year | Sophomore Year |
| :---: | :---: |
| S.H. | S.H. |
| English ............................. 6 | English .............................. 6 |
| Bible ................................ 6 | Foreign Language ............. 6 |
| Foreign Language ............. 6 | Biclogy or History ........... 8 or 6 |
| Mathematics ...................... 6 | *Economics and Political |
| History or Biology ........... 6 or 8 | Science or Psychology .. 6 |
| 30 or 32 |  |
| Junior Year | 30 or 32 |
| Religion ............................. 6 | Senior Year |
| Psychology or Philosophy 6 | Religion ............................ 12 |
| Chemistry or Physics or | $\dagger$ Philosophy or Psychology 6 |
| Economics (6) ............... 8 | Electives ............................. 12 or 14 |
| Electives ............................. 14 or 12 |  |
|  | 30 or 32 |

## GROUP IV

## Pre-Medical

This course is designed for students who expect to pursue the study of medicine after graduation from college. The required work consists of twelve semester-hours of English, including six of composition and six of literature; twelve of foreign language, provided the student pursues the study of French and German until he has completed the equivalent of French 3 and 4 and German 107-08; six of Bible; ten of physics; sixteen of chemistry, including eight of organic chemistry; eight of zoölogy, twenty-two additional of laboratory science;

[^11]six of psychology ; six of history or economics ; six of mathematics; and twenty-four of free electives.

Those students who at the end of their first year of college work are recommended for good and sufficient reasons by their teachers of science and the Dean of the College as being capable of doing acceptable work in a medical school without completing the college requirements for graduation will be allowed to arrange a special course of studies that will prepare them to meet the minimum requirements of first-class medical schools by the end of their sophomore year. The tabulation of courses below is made with this possibility in view.

The School of Medicine will be opened October 1, 1930. Requirements for admission to the School are explained in a special bulletin which may be obtained from the Dean of the School of Medicine.

The following arrangement of courses is authorized for students electing this group. The student taking his A.B. degree in this group may postpone some of the work of the freshman and sophomore years until his last two years.

| Freshman Year | Sophomore Year |
| :---: | :---: |
| S.H. | S.H. |
| English ..................................... 6 | English ..................................... 6 |
| Mathematics ............................... 6 | Bible ............................................ 6 |
| French or German .................... 6 | Physics ..................................... 10 |
| Zoölogy ...................................... 8 | Chemistry 21 and 30 (or 151- |
| Chemistry 1-2 ............................ 8 | 152 if student is eligible) ....... 8 |
|  | French or German ....................... 6 |
| Junior Year $\quad 34$ | 36 |
| Psychology ................................. 6 | Senior Year |
| History 9 and 91 or Economics 1 or Economics 102 $\qquad$ | Laboratory sciences ................................................... 13 Electives ............ |
| Laboratory sciences .................... 9 | - |
| Electives .................................... 9 | 26 |

30

## GROUP V

## Teaching

This group is designed for four classes of students: (A) those who expect to teach in colleges or universities, or who for similar reasons expect to do advanced work in a graduate
school; (B) those who expect to teach in secondary schools; (C) those who expect to teach in elementary schools; and (D) those who expect to adopt as a vocation some form of public school administration. For each class a course of study is suggested below. All four classes are required to take the same general work as students in Group I, as follows: twelve semes-ter-hours of English; eighteen of foreign language (except as specifically modified in the descriptions of Classes B, C, and D) ; sixteen of biology, chemistry, or physics, including eight each in any two of the three sciences; six of Bible; six of mathematics; six of economics and government; and six of history.

Since transfer from Group I (General) to Group V (Teaching) is easy, students are advised not to enter Group V until satisfied that they expect to teach after graduation. It is especially difficult, however, for prospective high school teachers to transfer after their sophomore year.

## CLASS A: COLLEGE TEACHING

Students in this class take the same freshman and sophomore work as students in Group I, except that they may take six semester-hours of education and psychology as sophomores. For foreign language work they need take only twelve semesterhours of French and German in college but must complete the equivalent of second-year college work in each. In addition to the sixty-four or seventy hours of work required, including the languages prescribed, each student must complete a major of at least twenty-four semester-hours of work in the subject the student expects to continue in graduate school, twelve semester-hours of work in subjects related to the major and approved by the department in which the major is selected; twelve semester-hours in education and psychology, or either, as a second minor, not including any secondary- or elementaryschool methods; and sufficient free electives to complete the one hundred and twenty-six semester-hours of work required for graduation.

## CLASS B: SECONDARY-SCHOOL TEACHING

Students who expect to teach in high schools should register in this group as early after their freshman year as possible, the work of that year being the same as for Group I. They have
the same general requirements as Group I, except that the eighteen semester-hours of foreign language, which must include two languages, may include as many as twelve semesterhours in courses beginning the study of a language. In addition to the seventy semester-hours of general required work, each student must take the following: twelve semester-hours of work in education, including three of educational psychology and three of secondary education; three semester-hours of general psychology; three semester-hours of directed observation and practice teaching ; six semester-hours, three in each of two fields of high school teaching, in materials and methods; and subject-matter work in the two subjects he expects to teach sufficient to amount to the following minimum amounts in the different fields as follows, including any of the generally prescribed work of Group I; twenty-four semester-hours of English, for prospective teachers of English; twelve semesterhours of Latin, over and beyond the traditional four units of Latin accepted for college entrance, for prospective teachers of Latin; eighteen semester-hours of French, over and beyond the two units of French accepted for college entrance, for prospective teachers of French; eighteen semester-hours of history and six of political science and economics, for prospective teachers of history and the social sciences; thirty semesterhours of biology, chemistry, physics, and geography or geology, for prospective teachers of high school science; and fifteen semester-hours of mathematics, for prospective teachers of mathematics. A student may prepare to teach only one science, or any one subject in high school, by taking a major of twentyfour hours in that subject in addition to general required work in Class B, the required work in education and psychology and the specific required work in directed observation and materials and methods in the chosen subject. Since, however, most inexperienced teachers have to serve an apprenticeship in small high schools, where they must teach classes in more than one subject, students are advised to meet the suggestions of the North Carolina State Department of Public Instruction and prepare to teach in two subjects, according to the course previously outlined in this paragraph.

Students who expect to teach are warned to read carefully the certification rules of the state in which they plan to work
and to advise fully with the Dean's office before electing courses in subjects they are preparing to teach. They are advised also to be careful to take their professional courses in the order outlined by the University department of education, reserving for their senior year the materials and methods courses and the directed observation and practice course. General psychology should be taken in the sophomore or the junior year.

## CLASS C: ELEMENTARY-SCHOOL TEACHING

Students in this class take the same freshman and sophomore work as students in Group I. except that they take one course in education each year, which may not, however, be substituted for English either year. General requirements are the same as in Class B. Six semester-hours of education each year, or a total of twenty-four semester-hours for the four years, take the place of the major described in Group I. By the permission of the Dean of the University, students in Class C may take as much as six semester-hours of additional elective work in education, exclusive of any work in general psychology. All students in the group are required to complete a minor of twelve semester-hours in some department other than education, and all must complete at least three semester-hours of general psychology. It is recommended, but not required, that students in this class complete at least six semester-hours in American history and government.

## CLASS D: PUBLIC SCHOOL ADMINISTRATION

This class is planned for students who expect to become principals or superintendents of schools, or to engage in other forms of public school administration. All requirements are the same as for Class C, except that (1) methods courses may be taken in either the secondary or the elementary field, (2) the six semester-hours in American history and government are prescribed, and (3) the work in education must include six semester-hours of school administration and supervision.

## GROUP VI

## Pre-Legal

This group is designed for students who expect to study law. The required work in this group consists of twelve se-mester-hours of English, including six of composition and six
of literature; eighteen of two different foreign languages, of which not more than six may be in a course beginning the study of a language, and this course must be followed by a second course in the same language; sixteen of biology, chemistry, or physics, including eight each in any two of the three sciences; six of mathematics; six of Bible ; six of history; six of economics; six of psychology; eighteen additional semester-hours of history and twelve additional semester-hours of economics; and free electives to complete the one hundred twenty-six se-mester-hours required for graduation. With the consent of the Department of Engineering the student may substitute three semester-hours of drawing and three semester-hours of surveying for one of the required courses in natural science.

The following arrangement of courses is authorized for students electing this group:

Freshman Year Sophomore Year


[^12]
## REQUIREMENTS FOR THE DEGREE OF BACHELOR OF SCIENCE IN CIVIL OR ELECTRICAL ENGINEERING

The studies for the degree of bachelor of science are designed for students who are preparing for civil or electrical engineering as a profession and lead to the degree of bachelor of science in civil engineering (B.S. in C.E.), or bachelor of science in electrical engineering (B.S. in E.E.).

Either of these degrees requires one hundred and thirtyeight semester-hours of work. Six semester-hours of electives must be taken in economics or political science. If a foreign language is elected it must be taken two years unless a student has sufficient entrance credits to enable him to pursue a more advanced course.

| GROUPS OF STUDIES FOR THE DEGREE OF BACHELOR OF SCIENCE IN CIVIL OR ELECTRICAL ENGINEERING GROUP I |  |
| :---: | :---: |
| Civil Engineering |  |
| Freshman Year |  |
| first semester | SECOND SEMESTER |
| S.H. | S.H. |
| Chemistry 1 .................. 4 | Chemistry 2 .................. 4 |
| English ........................ 3 | English ....................... 3 |
| Mathematics 1, 2 ............ 5 | Mathematics 2, 5 ............ 5 |
| Bible 1 ........................ 3 | Bible 2 ........................ 3 |
| Drawing 1 ................... 2 | Drawing 2 .................. 2 |
| Physical Education ............ R | Physical Education ............. R |
| 17 | 17 |
| Three weeks of Surveying 10 in summer. Credit, 3 semester-hours. |  |
| Sophomore Year |  |
| English ...................... 3 | English ....................... 3 |
| Mathematics 25 .............. 4 | Mathematics 30 ............... 4 |
| Physics for Engineers ......... 5 | Physics for Engineers ......... 5 |
| Surveying 11 ................ 2 | Mechanics 6 .................. 4 |
| Descriptive Geometry 3 ........ 2 |  |
| Physical Education ............ R | Physical Education ............. R |
| 16 | 16 |

Junior Year
Electrical Eng. 153 3 Hydrology 122 ..... 3
Hydraulics 107 4 Strength of Materials 108 ..... 3
Materials 109 2 Curves and Earthwork 112 ..... 3
Highways 115 2 Surveying 114 ..... 3
Electives 6 Electives ..... 6
17 ..... 18
Senior Year
Water Supply 123 2 Sewerage 124 ..... 2
Structures 131 3 Structures 132 ..... 4
Reinforced Concrete 133 3 Masonry 134 ..... 3
Railroad Engineering 117 3 Highways 116 ..... 2
Electives 6 Electives ..... 6
17 ..... 17
GROUP II
Electrical Engineering
Freshman Year
FIRST SEMESTER SECOND SEMESTER
S.H. ..... S.H.
Chemistry 1 4 Chemistry 2 ..... 4
English 3 English ..... 3
Mathematics 1, 2 5 Mathematics 2, 5 ..... 5
Bible 1 3 Bible 2 ..... 3
Drawing 1 2 Drawing 2 ..... 2
Physical Education R Physical Education ..... R
17 ..... 17
Three weeks of Surveying 10 in summer. Credit, 3 semester-hours.
Sophomore Year
English 3 English ..... 3
Mathematics 25 4 Mathematics 30 ..... 4
Physics for Engineers 5 Physics for Engineers ..... 5
Mechanism 81 ..... 4
Mechanics 6
Descriptive Geometry 3 ..... 2
Physical Education Physical Education ..... R
16 ..... 16
Junior Year
Princ. of Elec. Eng. 151 . ..... 4 Princ. of Elec. Eng. 152 ..... 4
Hydraulics 107 4 Strength of Materials 8 ..... 3
Differ. Equations 3 Elec. Measurements ..... 3
Thermodynamics 183 3 Thermodynamics 184 ..... 3
Electives 3 Electives ..... 3
17 ..... 16
Senior Year
Direct Currents 155 ............ 3 Electrical Machinery 154 ..... 6
Alternating Currents $157 \ldots . . .3$ Electric Power Stations 158 ..... 3
Elec. Transmission 5 3 High Freq. Currents 162 ..... 3
High Freq. Currents 161 ..... 3
Electives 6 Electives ..... 6
18 ..... 18

## COURSES OF INSTRUCTION**

Note: Courses primarily for freshmen and sophomores are numbered between 1 and 100, those primarily for juniors and seniors between 101 and 200, those primarily for seniors and graduates between 201 and 300. The amount of credit for each course is given in semester-hours following the description of the course.

## DEPARTMENT OF BIOLOGY

PROFESSORS CUNNINGHAM, BI.ONQUIST, POARSE, † WOLF, AND HALL, ASSISTANT PROFESSORS AVERY¥ AND HOPKLN゙S, MR. BELL, MR. BRECHER, MR. TRENTHAM, MR. WILLIAMS, MR. CHESLEY, MR. FENNEL, MR. PACE, MR. ROOT, AND MR. TIPTON

BOTANY
Odd-numbered courses are offered in the first semester, eren-numlered courses in the second semester.

## FOR UNDERGRADUATES

1. Introductory Botany.-A general course dealing with plants. Two laboratory periods and two conference periods each week. 4 s.h. Staff
2. Introductory Botany.-A general course which may be taken as a continuation of Botany 1. Two laboratory periods and two conference periods each week. 4 s.h.

Staff
51. General Bacteriology.-Laboratory and lectures. 4 s.h.

Mr. Blomquist
52. Local Flora.-Practice in the identification and classification of plants. 3 s.h.

Mr. Blomquist
Prerequisites, Botany 1 and 2.
101. Structure and Classification of Algae, Liverworts, and Mosses.-Laboratory and lectures. 3 s.h.

Mr. Blomquist
Prerequisites, Botany 1 and 2.
102. Structure and Classification of Ferns, Gymnosperms, and Angiosperms. -Laboratory and lectures. 3 s. h.

Mr. Avery
Prerequisites, Botany 1 and 2.

[^13][^14]152. Plant Anatomy.-An introduction to general plant anatomy with some reference to cultivated plants. Laboratory and conferences. 3 s.h.

Prerequisite, Botany 1.
Mr. Avery
FOR SENIORS AND GRADUATES
201. Cytology.-A study of the plant and animal cell. Laboratory, lectures, and conferences. 4 s.h. Mr. Avery
Prerequisites, Botany 1 and Zoölogy 1-2 and one other course of intermediate grade.
[Not offered in 1930-31]
202. Inheritance and Variation.-A study of the principles of inheritance and variation in plants and animals. Lectures and conferences. 3 s.h.

Prerequisites, Botany 1 and 2.
Mr. Blomquist
225. Special Problem.-Hours and credits to be arranged.

Staff

## zoology

Odd-numbered courses are offered in the first semester, even-numbered in the second.

1-2. General Zoölogy.-First semester: An elementary survey of the animal kingdom, with particular reference to invertebrates. Second semester: General principles of vertebrate animal structures, functions, environmental relations, development of the individual and of the race, man's place in nature. 8 s.h. Professors Pearse and Hall, and Assistant Professor Hopkins
41. Elementary Comparative Anatomy.-This course is a continuation of Course 1-2, and is recommended for pre-medical students. The laboratory work consists of the dissection and comparison of a number of types of vertebrates. 4 s.h.

Professor Cunningham
Prerequisite, Zoölogy 1-2.
44. Comparative Histology.-The evolution of tissues. 4 s.h.

Assistant Professor Hopkins
152. Comparative Physiology.-The primary functions of animals of all groups and a more detailed study of the physiological processes in mammals. 4 s.h.

Professor Hall
Prerequisite, one year of Zoollogy.
181. Animal Micrology.-The technique of preparing normal sections of the various types of tissue. 4 s.h.

Professor Cunningham
191. General Embryology.-The fundamental principles of embryology, especially in the frog and the chick, with some work on the mammal. 4 s.h.

Professor Cunningham
221. Entomology.-The taxonomy, morphology, and physiology of insects, their theoretic and economic aspects. For students who have had at least one year of Zoölogy. Offered in even years. 4 s.h.

## Assistant Professor Hopkins

231. Protozoölogy.-A study of the taxonomy, morphology, and physiology of unicellular organisms. For students who have had at least one year of Zoölogy. Offered in alternate years. 4 s.h.

## Assistant Professor Hopkins

261. Animal Parasites.-A consideration of animal parasites with particular emphasis upon those infesting man. Of particular interest to students preparing for medicine or public health work. 4 s.h.

Professor Pearse
Prerequisite, Zoölogy 1-2.

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courses primarily for graduates, but open to seniors
with adequate training
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272. Ecology.-Natural history of animals-relations to environment. Assigned readings, lectures, reports, conferences. For students who have had at least one year of Zoollogy. Offered in odd years. 2 s.h.

Professor Pearse
201. Animal Behavior.-The development of mind in animals. Assigned readings, lectures, reports, conferences. Offered in even years. 2 s.h.

Professor Pearse
228. Endocrinology.-This course includes the structure, physiology, and embryology of the endocrine glands. The work consists of lectures and reading assignments and reports. 2 s.h.

Professor Cunningham
232. Advanced Protozoölogy.-Lectures and conferences, on the recent developments in the field of Protozoollogy. In the laboratory an individual problem will be undertaken by each student. The prerequisites for the course are (1) a definite and feasible problem, and (2) the proper training for carrying out this problem. 4 s.h.

## Assistant Professor Hopkins

219-220. Research.-Students who have had proper training may carry on research under the direction of members of the faculty. Staff
262. Advanced Parasitology.-Lectures, conferences, and readings dealing with practical and theoretical matters relating to animal parasites. Laboratory work on special problems may be taken in connection with this course by registering for Course 219-220. Offered in odd years. 2 s.h.

## Professor Pearse

274. Advanced Ecology.--Readings, conferences, and reports; directed work in field or laboratory. Offered in even years. 2 or more s.h. Professor Pearse
275. Experimental Embryology.-Lectures, assigned readings, and reports. In the laboratory a study is made of the effects of environment on various forms of animals. including the frog, chick, and mammal. Students electing laboratory work in connection with this course should register for Zoölogy 219-220. 2 s.h.

Professor Cunningham
[Not offered in 1930-31]

## TYGIENE AND HEREDITY

8. Hygiene.-This course is open to students of all four years without preliminary requirements. The chief topics for discussion are: human anatomy and physiology; personal hygiene; nutrition; deficiency, bacterial, and protozoal diseases. 2 s.!.

Professor McDougal, Dr. Pearse, and Dr. Davison
107. Heredity and Eugenics.-A non-technical presentation of the biological principles involved in heredity. This course does not give science credit. 3 s.h.

Professor Cunningham

## DEPARTMENT OF CHEMIST'RY

PROFESSORS GROSS AND WILSON, ASSISTANT PROFESSORS VOSBURGH AND BIGELOW, DR. HAUSER, DR. BOLICH, MR. SAYLOR, AND MESSRS. ELMORE, FORD, GILLESPIE, JENKINS, METLER, AND PRIEPKE

The courses in the department are planned with the following objects in view: (1) to give students taking chemistry as a required science a thorough knowledge of the elementary principles of the science by studying in the laboratory the more important elements and compounds which have industrial and domestic uses and by surveying briefly the chemical and economic significance of the more important industrial processes; (2) to make provision for the necessary chemical training of scientific and professional students by offering thorough, intensive work in analytical, organic, and physical chemistry; (3) to provide for those students specializing in chemistry as prospective chemists, teachers, or chemical engineers comprehensive training in higher courses, together with the opportunity to engage in investigations both of an industrial and of a pure-science nature and (for teachers) to do practice teaching.

A major in chemistry in Group I consists of twenty-four semesterhours distributed as follows: courses 21, 30, 151-152, 261-262, totaling twenty semester-hours, and four semester-hours chosen from the following courses: 231, 232, 240, 241, 253-254, 270, 215-216.

Unless otherwise specified, odd-mumbered courses are offered in the first semester, even-numbered in the second.

1-2. General Inorganic Chemistry.-Lectures, recitations, and laboratory work on the elementary principles of chemistry and on the occurrence, preparation, properties, and uses of the elements and their compounds. It is desirable, though not required, that students taking this course shall have taken elementary physics either in high school or in college. One lecture, two recitations, and three laboratory hours, throughout the year. 8 s.h.

Professor Wilson with Professor Gross, Assistant Professors Vosburgh and Bigelow, Dr. Hauser, Dr. Bolich, Mr. Saylor, and Messrs. Elmore, Gillespie, and Priepke
41. Household Chemistry.-A course dealing with materials used chiefly in the home. It is open to students who have passed Chemistry 1-2 or who have had elementary chemistry accepted for entrance credit. Two recitations and three laboratory hours. 3 s.h. Professor Wilson
21. Qualitative Analysis.-A study of the reactions of acids, bases, and salts in solution as applied to the qualitative analysis of mixtures of inorganic compounds of the more familiar elements. Two lectures and six laboratory hours. Each laboratory section is limited to a maximum of 23 students. 4 s.h. Assistant Professor Vosburgh, Dr. Hauser, and Messrs. Ford and Metler
Prerequisites, Chemistry 1-2 and college algebra.
30. Quantitative Analysis.-A number of representative analyses are carried out in the laboratory and the underlying theory is taken up in the lectures. Two lectures and six laboratory hours. Each laboratory section is limited to a maximum of 23 students. 4 s.h.

Assistant Professor Vosburgh, Dr. Hauser, and Messrs. Ford and Metler
Prerequisite, Chemistry 21. Analytic geometry and college physics are desirable but not required.

151-152. Organic Chemistry.-An introduction to the study of the compounds of carbon. Both the aliphatic and the aromatic series will be dealt with, and the lectures illustrated by selected laboratory experiments. Two lectures, one recitation and three laboratory hours, throughout the year. 8 s.h. Assistant Professor Bigelow and Dr. Hauser

Prerequisites, Chemistry 21 and 30 unless specifically excused by the Department.

261-262. Physical and Electro Chemistry.-Fundamentals of general theoretical chemistry illustrated by selected laboratory experiments. Two recitations and three laboratory hours throughout the year. 6 s.h.

Prerequisites, Chemistry 30, 151-152, college physics, and college algebra. Calculus is desirable but is not required.

215-216. Advanced Inorganic Chemistry.-A study of modern valence theory and of inorganic compounds, particularly of the less common types, illustrated by suitable laboratory preparations. Two recitations and three laboratory hours throughout the year. 6 s.h.

Assistant Professor Vosburgh
Prerequisites, Chemistry 1-2, 21, 30. Chemistry 261-262 and advanced physics are desirable.
231. Advanced Quantitative Analysis.-A continuation of Course 30, involving some of the more difficult analytical methods. One recitation and six laboratory hours. 3 s.h. Assistant Professor Vosburgh

Prerequisite, Chemistry 30. Chemistry 261-262 is desirable.
232. Instrumental Analysis.-A study of the use of physical measuring instruments in chemical analysis. One recitation and six laboratory hours for one semester. 3 s.h. Assistant Professor Vosburgh

Prerequisites, Chemistry 30, 261-262, and 231. Laboratory physics is desirable.
260. Colloid Chemistry.-An introductory study of the colloidal state of matter. Two recitations and three laboratory hours for one semester. Semester to be arranged with the Department. 3 s.h.

Assistant Professor Vosburgh
Prerequisites, Chemistry 151-152 and 261-262. Calculus, Chemical Thermodynamics, and advanced physics are desirable.
240. Food and Nutrition.-This course naturally follows course 41 and may be taken by persons passing that course or those who have taken or are taking course 151-152. Two recitations and three laboratory hours. 3 s.h.

Professor Wilson
241. Physiological Chemistry.-A study of the chemistry of human physiology. Clinical aspects of the subject are treated with reference to the need of prospective medical students. Two recitations and six laboratory hours. 4 s.h.

Professor Wilson
Prerequisites, Chemistry 30 and 151-152. Course 261-262 is desirable though not required.
244. Metabolism.-Open to students who have completed course 242 or its equivalent, and who have a reading knowledge of German. Lectures and collateral reading deal with the probable fate of foodstuffs in the body, the nitrogen balance, energy requirement, nutritive ratios, vital factors, and ductless glands. The laboratory work consists mainly of blood analysis under both normal and pathological conditions. The laboratory work of this course without the lectures may be taken by students who have passed Chemistry 241. In this case only two semesterhours credit will be given. Two recitations and six laboratory hours. 4 s.h.

Professor Wilson

251-252. Intermediate Organic Chemistry.-Intended for students who nave had elementary organic chemistry but whose preparation is insufficient for Chemistry 253-254 or research, and to meet the minor requirements of graduate students in other departments. Three recitations. 3 s.h. Assistant Professor Bigelow
253-254. Advanced Organic Chemistry.-A continuation of Chemistry 151-152, including discussion of the theories of organic chemistry. The laboratory work will include preparations of the more difficult type, requiring reference to the original literature. One lecture and nine laboratory hours. 8 s.h. Assistant Professor Bigelow and Dr. Hauser

Prerequisites, Chemistry 151-152 or equivalent and a reading knowledge of German.
256. Organic Analysis.-The elements of organic qualitative and quantitative analysis, primarily for students taking organic research. Nine laboratory hours. One semester to be arranged with the Department. 3 s.h. Assistant Professor Bigelow and Dr. Hauser Prerequisite, Chemistry 151-152 or equivalent.
280. Teaching of Chemistry.-Members of this course spend from 3 to 6 hours a week in laboratory instruction, each having supervision of about 24 students. The members of the course also meet one hour a week for lecture, conference, or recitation. In addition to the above hours, they prepare the regular work of the course in which they are supervising, correct laboratory notebooks, and do the reference reading and study necessary for the conference hour. One semester to be arranged with the Department. 2 or 3 s.h. Professor Wilson
(The amount of credit depends on whether 3 or 6 hours are spent in the laboratory in addition to the conference hour.)
271. Introduction to Research.-Lectures on the use of chemical literature, research methods, recording and publication of results, preparation of theses and other topics. One lecture. I s.h.

> Professors Gross and Wilson, Assistant Professors Vosburgh and Bigelow
273-274. Research.-The aim of this course is to give instruction in methods used in the investigation of original problems. Nine hours a week, laboratory and conferences. 3 or 6 s.h.

Professors Gross and Wilson, Assistant Professors Vosburgh and Bigelow, and Dr. Haúser
Students may elect the first semester without taking the second. The amount of credit will depend on whether the course is pursued for one or two semesters. It is open to seniors who have had courses 30,151 152, and 261-262.

275-276. Seminar.-Open to seniors qualifying for honors in the department and required of all graduate students in chemistry. One hour a week discussion. 2 s.h.

Professors Gross and Wilson, Assistant Professors
Vosburgh and Bigelow, and Dr. Hauser

# DEPARTMENT OF ECONOMICS AND POLITICAL SCIENCE 

PROFESSORS GLASSON, COTTON, HOOVER,* WILSON, AND HAMILTON,* ASSO-
CIATE PROFESSOR RANKIN, ASSISTANT PROFFSSORS LANDON, GRAY, ROBERTS, AND TOWE, AND MESSRS. SHIELDS, HARVILL, RATCHFORD, SIMPSON, SMITH, ASHBURN, HAGAN, SHARKEY, AND WHITMAN
This department offers instruction in general economics, business administration, and political science. The general course in economics affords a survey of the whole field of economic thought and lays the foundation for specialized study in various branches of the subject. Advanced courses are offered in theoretical and applied economics.

A special group of studies is provided for candidates for the bachelor of arts degree who are definitely looking forward to a business career at the conclusion of their college course. This group is described as Group II in "Business Administration" in this catalogue. While Group II is mainly composed of liberal rather than technical studies, it gives opportunity in the junior and senior years for specialized study in such subjects as money and banking, public and corporation finance, investments, railroad and water transportation, marketing, insurance, industrial management, accounting, and business statistics.

In political science, the department offers courses which deal with the nature, origin, and functions of the state and which give detailed consideration to the political institutions of the United States, England, and other countries. Courses are also offered in political theory, international government and relations, state government, and city and county government.

L'nless otherwise specified, courses are offered throughout the year.

## ECONOMICS AND BUSINESS ADMINISTRATION

## PRIMARILY FOR FRESHMEN

A. Description of Modern Industry; Economic Geography.-This course aims to furnish beginners with a background of information preparatory to the study of general economics. It is required of Freshmen in the Business Administration Group and is open to Freshmen in some of the other groups. 6 s.h.

Assistant Professor Landon

FOR SOPHOMORES AND JUNIORS

1. Principles of Economis.-This course must be taken by all students planning to elect further courses in economics and business administration. 6 s.h. Professors Hoover and Hamilton, and Assistant

Professors Roberts, Gray, and Landon, and
Messrs. Harvill and Smith

## FOR JUNIORS

115. Economic Geography; Teachers' Course.-This course is not open to sludents who have received credit for Economics A. Recommended for

[^15]all students in Teaching Group, Class C. An introductory study of the relations existing between geographic conditions and the various types of activity by means of which man gains a living. An intensive study of North America. First semester. 3 s.h. Assistant Professor Landon
116. Economic Geography and Industrial Organization.-This course is not open to students who have received credit for Economics A. Recommended for all students in Teaching Group, Class C. An intensive study of major industries as affected by geographic environment. Prerequisite, course 115. Second semester. 3 s.h. Assistant Professor Landon

## FOR JUNIORS AND SENIORS

[Note: The attention of students who are taking, or who propose to take, courses 104, 144, 105, 158 is called to Mathematics 21, "Mathematics of Investment." This course is recommended as an elective for Sophomores or Juniors.]
104. Corporation Finance.-A study of the growth of corporations, their organization and securities; methods of financing; problems connected with the management of capital and the distribution of earnings; the promotion and financing of corporate consolidations; corporate insolvency and reorganization. First semester. 3 s.h. Mr. Ratchford

Prerequisite, course 1.
144. Investment and Speculation.-The accumulation of capital. The different types of investment securities. Investment banking. The stock exchange and its functions. Taxation of investments. Analysis of investments. Second semester. 3 s.h.

Mr. Ratchford
Prerequisite, course 1.
105. Industrial Management and Business Forecasting.-The general idea of costs and the different classes of costs. The business cycle and forecasting business conditions; the control of an industry in the business cycle. The Harvard Index of General Business Conditions and the Babson and Brookmire economic and statistical services are used and reported on by the students. First semester. 3 s.h. Professor Cotton
158. Insurance.-Introduction to actuarial science. A general course dealing with life, fire, health, and accident insurance; employer's liability; workmen's compensation; credit and automobile insurance; and also with bonding companies. Insurance accounting. This course is designed to give a knowledge of the chief principles and practices of insurance. A standard textbook is used. Second semester. 3 s.h.

Professor Cotton
106. Railway, Ocean, and Inland Waterway Transportation.-History of the development of railways in the United States. Railway organization and finance; traffic management; federal and state regulation of railroads; the present status of the railroad problem. Inland water trans-
portation. Ocean transportation. Collateral reading and the preparation of term papers are required. 3 s.h.

Mr. Harvill
[Not offered in 1930-31]
168. Marketing Problems.-This course is designed to study the marketing of staple crops such as cotton and wheat. It also deals with the coöperative marketing of a variety of commodities. Particular attention is given to the marketing of the cotton crop. A study is made of the methods of trading and functions of the New York, New Orleans, and Liverpool Cotton Exchanges. Collateral reading and the preparation of term papers are required. 3 s.h.

Mr. Harvill
[Not offered in 1930-31]

## FOR SENIORS AND GRADUATES

203. Money and Banking.-After a preliminary study of monetary history and theory, together with an account of the development of credit instruments, there follows a more extended presentation of the theory and practice of banking. First semester. 3 s.h.

Professor Glasson and Mr. Ratchford
Students who elect this course must have made a creditable record in course 1.
235. Public Finance.-This course deals with public expenditures, public revenues, public debts, and financial administration. Second semester. 3 s.h. Professor Glasson and Mr. Ratchford

Students who elect this course must have made a creditable record in course 1.
237. American Federal Finance.-A survey of the organization and methods of contemporary American federal finance with special attention to tariff revision, public debt administration, and budgetary procedure. First semester. 3 s.h. Assistant Professor Gray
[By special permission, Seniors may substitute course 237 for course 235]
238. Industrial and Financial History of the United States.-The development of American industrial and financial institutions and their economic and ideological backgrounds. Second semester. 3 s.h.

Assistant Professor Gray
[By special permission, Seniors may substitute course 238 for course 203]
239. Statistical Methods.-Statistical analysis as a tool in investigation; its limitations, and the interpretation of statistical results. Methods especially applicable to economic data are given most attention. Two hours lecture and one laboratory period. First semester. 3 s.h.
[Not offered in 1930-31]
Assistant Professor Gray
240. Statistical Analysis of Time Series.-A study of so-called business "cycles" and "barometers" and the analysis of other periodic economic
phenomena. Prerequisite, course 239. Two hours lecture and one laboratory period. Second semester. 3 s.h.
[Not offered in 1930-31]
Assistant Professor Gray
254. Trade Unionism and Labor Problems.-Economic and industrial conditions that have given rise to unionism. A brief history of unionism in England and the United States. The structure, methods, and policies of modern unions. First semester. 3 s.h. Professor Cotton
[By special permission, Seniors may substitute course 254 for course 106]
255. Industrial Relations.-This course deals with the fundamental principles underlying industrial relations. Policies and plans of the management concerning employees are discussed. The class will study the organization of the labor department of various industries. Course 254 is a prerequisite for this course. Second semester. 3 s.h.

Professor Cotton
[By special permission, Seniors may substitute course 255 for course 168]
265. International Trade-An analysis of the theoretical principles underlying international trade together with an historical study of the foreign trade and tariff policies of the United States, France, Germany, and England down to 1914. First semester. 3 s.h.

Assistant Professor Roberts
266. Foreign Trade and Recent Commercial Policy.-A study of the influence on foreign trade of post-war protectionism, war debts, international capital movements, and inconvertible paper money. Practical problems in buying and selling abroad. Special attention given to Latin America. Second semester. 3 s.h. Assistant Professor Roberts
214. Economic Systems.-A study of alternative economic systems. In addition to an analysis of communism, anarchism and the variants of socialism, the course will include a consideration of other proposed modifications of the existing economic order. First semester. 3 s.h.

Professor Hoover
215. Economic Functions of the State.-A consideration of the primary and secondary economic functions of government and of the legislation which provides for the performance of these functions, such as social legislation and the regulation of commerce and industry. Second semester. 3 s.h.

Professor Hoover

FOR GRADUATES AND SENIORS BY SPECIAL PERMISSION
210. History of Political Economy.-This course traces the development of economic theory, giving special attention to the various schools of economic thought in England, France, Germany, and the United States. A large amount of collateral reading in the works of typical authors is required. Lectures and class-discussions. 6 s.h.

Assistant Professor Roberts
212. Value and Distribution.-This course is designed to introduce students to some of the more complex aspects of economic theory. Controversial phases of theory are surveyed through the medium of the works of the foremost modern economists. The course will also serve as a general review of economic theory for graduate students. 4 s.h.

Professor Hoover* and Assistant Professor Roberts
349. Research in Corporation Organization and Finance.-Open to graduate students and, by special permission, to Seniors who have completed creditably courses 104 and 144. Second semester. 2 s.h.

Professor Glasson

## accountancy and business law <br> FOR SOPHOMORES

7. First-Year Accounting.-Elementary principles of single proprietorship, partnership, and corporation accounting. Supervised laboratory periods will be assigned. 6 s.h.

Professor Cotton and Messrs. Shields and Whitman
FOR JUNIORS AND SENIORS
72. Second-Year Accounting.-Advanced theory applied to the accounting process. Open to students who have completed Accounting 7. 6 s.h. Mr. Shields
[Students specializing in Accounting may substitute this course for courses 105 and 158]

## FOR SENIORS

173. Auditing.-Theory and practice of balance sheet and detailed audits and special investigations. Students admitted to the course by permission of the instructor. First semester. 3 s.h. Mr. Shields
174. C. P. A. Problems.-Practical accounting problems, auditing, analysis and theory of accounts in preparation for the Certified Public Accountant examination. Students admitted to the course by permission of the instructor. Second semester. 3 s.h.

Mr. Shields
176. Income Tax Accounting.-A study of federal and state income tax laws; problems in the preparation of tax returns and claims for refund. First semester. 3 s.h.

Mr. Shields
177. Modern Accounting Systems.-Systems and the forms for recording data of basic manufacturing industries, banks, building and loan associations, estates, and municipalities. Special attention will be paid to budgetary accounting. Second semester. 3 s.h. Mr. Shields
178. Business Law.-The fundamental principles of law as applied to common business transactions. The topics presented are: contracts, agency, bailments, sales, negotiable instruments, partnership, corpor-

[^16]ations, and bankruptcy. Textbook: Bays, Business Law. Casebook: Bays, Cases on Commercial Law. Required of Seniors in the Business Administration group. 6 s.h. Assistant Professor Towe

FOR SENIORS AND GRADUATES
275. Advanced Industrial Accounting and Management.-This course traces the ways and means of executive control through statistics and industrial accountancy. Emphasis is put upon the economics of overhead costs. A complete practice set of cost accounting is worked by each student during the course. 6 s.h. Professor Cotton

Courses 105 and 7 are ordinarily prerequisites for this course.

## political science

FOR JUNIORS
102. American Government and Politics.-A brief preliminary study of political organization in general is followed by a more detailed study of the American political system. The subject matter includes the several departments of the national government, the structure and functions of state governments in the United States, and the political organization of smaller areas in America. 6 s.h.

Professor Wilson, Associate Professor Rankin, and Mr. Simpson
Course 102, which may be taken whether or not course 1 has been taken, is ordinarily prerequisite for any other course in political science; students who have not had this course or its equivalent, may be admitted to other courses in political science by approval of the individual instructors concerned.

FOR SENIORS AND GRADUATES
228. American Political Institutions.-A study of the formation and development of the institutions of the national government in the United States. Federal organs of government are treated historically and analytically. 3 s.h.

Associate Professor Rankin
[Not offered in 1930-31]
225. American Political Parties and Practical Politics.-A study of the historical development, organization, and methods of political parties in the United States. Special attention is given to current American politics. First semester. 3 s.h.

Associate Professor Rankin
226. Parliamentary Government.-This course, being a comparative study of popular government in modern states, deals particularly with the political systems of the British Empire, France, Germany, and Switzerland. Second semester. 3 s.h. Associate Professor Rankin
208. American Constitutional Law and Theory.-Attention is given to leading constitutional principles of American government, as developed through judicial interpretation. Emphasis is placed upon problems of current importance. Lectures, reading of cases, assigned legal problems. First semester. 3 s.h.

Professor Wilson
264. Railroad Regulation in the United States.-A brief consideration of the general problem of governmental regulation of railroads is followed by a more intensive study of the powers and activities or regulatory bodies, state and federal. The latter part of the course deals with an analysis of the Transportation Act of 1920 and its administration up to the present time. Second semester. 3 s.h.

Professor Wilson
209. State Government in the United States.-The subject-matter covers the historical development of government in the states of the Union, the present political organization, and relations between state and federal government. First semester. 3 s.h. Associate Professor Rankin
294. City and County Government.-A study of the general problems of city government in the United States and in Europe. The latter part of the course is devoted to a study of county government in the United States, with particular reference to North Carolina. Second semester. 3 s.h.

Associate Professor Rankin
223. Political Thought to the Seventeenth Century.-In the course of a survey of political thought from the time of Plato and Aristotle to the seventeenth century, special emphasis is placed upon the development of important concepts in political theory. First semester. 3 s.h.

Professor Wilson
[Not offered in 1930-31]
224. Modern Political Theory.-The political theories of Hobbes, Locke, Rousseau, Montesquieu, Harrington, Burke, and John Stuart Mill are studied with particular reference to their influence upon American political thought. The latter part of the course deals with socialism and the modern idea of the state. Second semester. 3 s.h. Professor Wilson
[Not offered in 1930-31]
227. International Law and International Organization.-Elements of international law and the application of principles through recent judicial interpretation and in international negotiations. Particular attention is give to the manner in which the law has been interpreted and applied by the United States. The League of Nations and the Permanent Court of International Justice are studied in some detail. 6 s.h.

Professor Wilson

## DEPARTMENT OF EDUCATION

PROFESSORS HOLTON, PROCTOR, AN゙D CHILDS, VISITING PROFESSOR TROTH, ASSOCIATE PROFESSOR CARR, ASSISTANT PROFESSOR DIMMITT, AND MRS.

SMITH, MR. MAJOR, MR. GODARD, MR. MCEWEN, MISS GRAY, AND MISS SOUTHERLAND

The purposes of the Department of Education are (1) to develop greater appreciation of the value of the school as an institution; (2) to impart a knowledge of educational principles and methods of teaching; (3) to acquaint the student with the status of elementary and secondary
education of the present day and to equip him for service in these fields as superintendent, supervisor, principal, or teacher ; (4) to make a careful study of educational conditions and needs in North Carolina and in the South.

Courses in the department are designed for three groups of students: (1) students with teaching experience or others who have definitely chosen teaching as their life work; (2) Juniors and Seniors who desire to study the school as an outstanding social institution; and (3) teachers whose work will permit them to enroll in Saturday and afternoon classes.

Students who do not expect to teach but merely desire an understanding of the school as part of a liberal education are advised to elect such courses as 54 and 105 for their introductory work in the department and then to elect further work in accordance with their special interests. Students who expect to engage in the various phases of teaching should plan their courses in accordance with the general regulations for Group V as outlined in this catalogue, p. 41.

## FOR FRESHMEN

0. Orientation Course in Study and Study Habits.-A course for freshmen whose high school and other records indicate the need of help in working out a satisfactory method of study. The factors of study, the use of text-books, note-taking from lectures and parallel readings, and applications of the factors of study to the daily problems of the student are among the matters considered. Either semester. 3 s.h.

Professor Proctor, Assistant Professor Dimmitt, Messrs. Major and Godard

FOR FRESHMEN AND SOPHOMORES
8. The Learning Process.-A course in elementary educational psychology, required of all freshmen and sophomores entering Group V. Either semester. 3 s.h.

Professor Childs and Assistant Professor Dimmitt
FOR SOPHOMORES WHO HAVE HAD COURSE 8, AND FOR JUNIORS $\qquad$
10. Introduction to Teaching.-A survey of the work of the teacher intended to assist the pupil in choosing intelligently some field of teaching work for future specialization. Topics: qualification and training of teachers, nature and aims of education, nature and purpose of public school curricula, nature of subject-matter and its relation to pupil activity, modern classroom procedure in teaching. Either semester. 3 s.h.

Associate Professor Carr
FOR SOPHOMORES WHO HAVE HAD COURSE 10 AND FOR JUNIORS
54. Introductory Course in the History of Education.-A study of the types of educational systems and institutions evolved in western Europe and the United States as an introduction to current educational problems. Either semester. 3 s.h.

Professor Holton, Visiting Professor
Troth, and Mr. McEmen
105. Introduction to Educational Sociolegy.-A study of social forces, processes, and values as affecting education, and the interaction of school and community. Either semester. 3 s.h.

Professor Childs and Mr. McEifen

## FOR JUNIORS

103. School Organization and Administration for the Classroom Teacher.-A study of the problems of school organization, control, and administration as they arise in the work of the classroom teacher. Either semester. 3 s.h. Visiting Professor Troth
104. Child Psychology.-A treatment of the outstanding characteristics of children of elementary school age, their bodily growth and development, their characteristic ways of knowing, feeling, and acting, and the best methods and materials for stimulating and guiding the instruction of such children. Prerequisite: six semester-hours of Education or Psychology. Second semester. 3 s.h.

Professor

## FOR JUNIORS AND SENIORS

102. Methods of Teaching and Presentation of Subject-Matter in the Primary School.-A study of materials and methods in the mother-tongue, writing, and number in the primary grades. A minimum of fifteen laboratory periods of observation and practice-teaching. First semester. 3 s.h.

Associate Professor Carr and Miss Gray
112. Methods of Teaching and Presentation of Subject-Matter in the Primary School.-A study of materials and methods in the primary subjects other than language, reading, writing, and arithmetic. A minimum of fifteen laboratory periods of observation and practice-teaching. Second semester. 3 s.h. Associate Professor Carr and Miss Gray
107. Methods of Teaching and Presentation of Subject-Matter in the Grammar Grades.-A study of materials and methods in the language, reading, and arithmetic of the grammar grades. A minimum of fifteen laboratory periods of observation and practice-teaching. First semester. 3 s.h. Associate Professor Carr and Miss Southerland

[^17]106. Principles of Secondary Education.-A study of the nature and scope of secondary education, emphasizing an introduction to the professional literature in the field. Either semester. 3 s.h. Professor Childs
108. Mental Tests and Applications.-A study of the development of intelligence testing, the conception of general intelligence, and various recent applications of mental tests. 3 s.h.

Assistant Professor Dimmitt
[Not offered in 1930-31]
109. Edncational Measurements.-A study of the purposes and uses of standardized tests and scales with special emphasis on their use in the improvement of instruction. 3 s.h. Assistant Professor Dimmitt
[Not offered in 1930-31]

## FOR SENIORS

116. General Methods in the High School: Observation and Practice Teach-ing.-A required course in Group V, Class B, open only to Seniors who have completed or are carrying course 106. Either semester. 3 s.h.

Visiting Professor Troth and Mr. McEwen
126. The Teaching of Physical Education.-Identical with Physical Education 102. The course counts as half-credit in the Department of Education for students who have had or are carrying Education 106 or 116 or other approved course in secondary education. Second semester.

Miss Grout

## FOR SENIORS AND GRADUATES

207. Technique of Teaching.-An advanced course in the teaching process, dealing with the theory underlying sound technique and applied specifically to the work of the elementary school. Prerequisite: teaching experience or six semester-hours of work in materials and methods. First semester. 3 s.h.

Associate Professor Carr
209. Statistical Methods Applied to Education.-A study of statistical methods of treating educational and social data designed to enable teacher or administrator to interpret and use the results of scientific investigations in education. Second semester. 3 s.h.

Assistant Professor Dimmitt
206. Psychological Principles of Secondary Education.-A study of adolescence and the psychology of learning as applied to teaching the principal high school subjects. 3 s.h.

Professor Childs and Visiting Professor Troth
[Not offered in 1930-31]
200. Introduction to the Philosophy of Education.-A consideration of fundamental concepts underlying educational theory. First semester. 3 s.h.

Professor Holton
[Not offered in 1930-31]
212. The Curriculum and Materials of the Elementary Grades.-A study of curriculum problems in the elementary school. First semester. 3 s.h. Associate Professor Carr
[Not offered in 1930-31]
253. Legal Phases of School Administration.-A study of judicial decisions and the development of outstanding features of statute law controlling school administration, with special emphasis upon North Carolina materials. Second semester. 3 s.h.

Professor Holton
244. Studies in the Historical Development of Public School Administration. -An advanced course devoted to the development of public school administration in the South, with especial reference to North Carolina as a type. First semester. 3 s.h.

Professor Holton
[Not offered in 1930-31]
214. History of Education in the United States.-A study of the development of the American public school and the interaction of higher education and the public school. First semester. 3 s.h. Professor Holton
205. Sociological Foundations of the Secondary School Subjects.-A consideration of the aims and objectives of secondary school subjects, emphasizing practical problems of curriculum-making in the high school. Prerequisite: six semester-hours in education, including course 105. First semester. 3 s.h.

Professor Childs
215. Principles of Vocational Guidance.-A study of the objectives and underlying principles of vocational education, emphasizing this phase of education in North Carolina and the South. The study seeks to formulate a working program for vocational counsellors and others whose teaching function will involve problems of vocational and educational guidance. Prerequisite: six semester-hours in educational sociology, preferably courses 105 and 205. Second semester. 3 s.h.

Professor Childs
[Not offered in 1930-31]
17 ${ }^{\text {a }}$. The Social and Economic Position of Women.-A course in vocational guidance for women that counts as a general elective, but not as part of either a major or minor in Education or toward a North Carolina state teacher's certificate. The purpose of the course is to give the historical background of the changing social and economic position of women, the contributions made by outstanding women, and the vocational opportunities open to women. Second semester. 2 s.h. Mrs. Smite
225. Rural Sociology.-A study of rural life with emphasis upon the social and economic forces which apply to the life of the rural community. Second semester. 3 s.h.

Professor Childs
[Not offered in 1930-31]
235. Principles of Vocational Education.-A study of the social basis for vocational education; a brief review of the developments in the field up to the present time; an examination of the present practices in the main fields of agricultural, commercial, industrial, and home-making vocational education. Second semester. 3 s.h.

Professor Childs
213. Secondary School Organization and Administration.-A study of the outstanding problems of secondary school organization and administration other than the problem of gradation and classification of pupils. Second semester. 3 s.h.

Professor Proctor
226. The Teaching of High School History.—Identical with History 212. The course counts as an elective in the Department of Education only when approved by the Department and the instructor. 6 s.h.

Associate Professor Shryock
246. The Teaching of Mathematics.-Identical with Mathematics 204. The course counts as an elective in the Department of Education only when approved by the Department and the instructor. Second semester. 3 s.h.

Professor Rankin
219. Experimental Education,-An introduction, including a brief historical survey of the field, to some of the most important problems and methods in experimental education. Experiments and reports in the general field of learning, the psychology of the school subjects, and related fields. 3 s.h.
[Not offered in 1930-31]
222. Methods of Teaching and Supervising the Fundamental Subjects.-An advanced course for teachers in service and for students who have completed at least twelve semester-hours of work in education. Second semester. 3 s.h.

Associate Professor Carr
[Not offered in 1930-31]
224. Current Problems in Public Education as Revealed Through School Surveys.-A study of recent developments in public education as revealed through school surveys and resulting from the survey movement. First semester. 3 s.h.

Professor Holton
[Not offered in 1930-31]
254. History of Secondary Edacation in the United States.-A study of historical and comparative conceptions of the secondary school, changes in American life affecting the secondary school, present status of the secondary school, current tendencies toward expansion, and the problem of state and federal aid. First semester. 3 s.h. Professor Proctor
[Not offered in 1930-31]
228. Psychology of Learning.-A study of different types of learning, the principles which underlie successful guidance of learning, methods and conditions of learning, individual differences, etc. Constant reference to experimental literature. First semester. 3 s.h.

## Assistant Professor Dimmitt

232. Eiementary School Supervision.-A survey of supervision as a means of improving instruction and adapting the curriculum to child and community needs. Second semester. 3 s.h. Associate Professor Carr
233. Administrative Pupil Accounting.-An advanced study of gradation and classification of pupils, with incidental attention to the keeping of records and the making of reports. The study includes a consideration of individual differences, promotions, acceleration, and retardation of pupils; the various plans for classification and gradation; interpreting the results of tests; and some practice in the computation of statistical measures. First semester. 3 s.h.

Professor Proctor
234. Recent Movements in American Education.-An intensive study of educational thought and practice since 1900. First semester. 3 s.h.

Professor Holton
[Not offered in 1930-31]

## FOR TEACHERS IN SERVICE AND FOR OTHER STUDENTS BY PERMISSION

Teachers are referred to such courses listed for Seniors and Graduates on this page and preceding pages, as may be scheduled for late afternoon hours and Saturday periods. Graduate teachers will find other courses in the graduate section of the annual catalogue and in the graduate bulletin. Undergraduate courses are offered when there is sufficient demand from teachers in the elementary schools.

## DEPARTMENT OF CIVIL AND MECHANICAL ENGINEERING

## Asbury Building <br> PROFESSORS BIRD, HALL, AND MR.

With the exception of course 10, odd-mumbered courses are offered in the first semester, even-mumbered courses in the second semester.

## DRAWING

1-2. Engineering Drawing.-Orthographic projection, lettering, pictorial representation, intersections, and developments. 4 s.h.

Messrs. Bird and Mr.
3. Descriptive Geometry.-Problems relating to point, line, plane, solid. Prerequisite, course 1-2. 2 s.h.

Mr.

## MECHANICS

6. Mechanics.-Concurrent forces, parallel forces, non-concurrent and non-parallel forces, centroids, friction, moment of inertia, translation, rotation, work, energy, momentum. Prerequisite, Mathematics 25. 4 s.h. Mr. Bird
7. Hydraulics.-Hydrostatics; flow of water through orifices, weirs, pipes, and open channels; general principles of water wheels and turbines. Prerequisite, course 6. 4 s.h. Mr. Hall
8. Strength of Materials.-Elastic bodies under stress; flexure of simple, overhanging, fixed, and continuous beams; columns; combined stresses; etc. Prerequisite, course 6. 3 s.h. Mr. Brdd
9. Materials of Engineering.-Study and testing of materials. One class and one three-hour laboratory period weekly. 2 s.h. Mr. Bird

## CIVIL ENGINEERING

10. Plane Surveying.-Exercise in use of chain, tape, compass, level, transit, and plane-table; surveys and resurveys. Eight hours a day, three weeks. Summer school. 3 s.h. Messrs. Bird and Hall
[For fee for this course, see bulletin of the Summer School.]
11. Plane Surveying.-Care and adjustment of instruments, differential and profile leveling, use of sextant, transit surveys. Prerequisite, 10. 2 s.h. Mr. Hall
12. Curves and Earthwork.-Simple, compound, and easement curves, earthwork computations, and mass diagrams as applied to highway work; observations on Sun and polars for latitude, time, and azimuth. 3 s.h.

Mr. Hall
114. Advanced Surveying.-Field work in connection with course 112. Slope staking, earthwork, simple and compound curves; determination of meridian by observations on Polaris and Sun. Concurrent with course 112. 3 s.h.

Mr. Hall
115. Highway Engineering.-Location, construction, and maintenance of roads and pavements; dust prevention; road economics. 2 s.h.

Mr. Hall
116. Highway Engineering.-Testing of cement, sand, stone, gravel, and bituminous materials. 2 s.h.

Mr. Hall
117. Railroad Engineering.-Construction and maintenance of track and track-work, economics, operating conditions affecting location. 3 s.h.

Mr. Bird
122. Hydrology.-Factors affecting precipitation, evaporation from land and water surfaces, relation of precipitation to run-off, estimating runoff, floods and flood flows, applications of hydrology. Prerequisite, course 107. 3 s.h.

Mr. Hall
123. Public Water Supply.-Quantity and quality of water required, hydraulics of wells, reservoirs, works for purification and distribution of water, tests and standards of purity of water for drinking purposes. Prerequisite, course 122. 2 s.h.

Mr. Hall
124. Sewerage.-Sewerage systems, rainfall and storm water flow, size of storm and sanitary sewers, sewage disposal. Prerequisite, course 122. 2 s.h.

Mr. Hall
131. Steel Structures-Stresses.-Roofs, parallel chord bridges under all types of loads, inclined top chord bridges including sub-divided panels, wind bracing. Prerequisite, course 6. 3 s.h.

Mr. Bird
132. Steel Structures-Design.-Built beams, plate girders, tension members, compression members, tension and compression members, end posts, stringers, floor beams, pins, plates, etc. Drafting. Prerequisites, courses 108, 131. 4 s.h.

Mr. Bird
133. Reinforced Concrete.-Theory and design of reinforced concrete beams, slabs, columns. Prerequisite, course 108. 3 s.h. Mr. Bird
184. Masonry Structures.-Ordinary foundations, dams, retaining walls, arches, piers, abutments. Prerequisites, courses 108, 133. 3 s.h.

Mr. Bird
240. Indeterminate Structures.-Introductory course dealing with the application of theory of least work, deflection, and rotation to indeterminate stresses. Problems are solved analytically, graphically, and by deformeter. Prerequisite, course 131. 3 s.h. Mr. Bird

## MECHANICAL ENGINEERING

8I. Elements of Mechanism.-A short course covering revolving and oscillating bodies, drives, transmissions, gears, gear trains, cams, linkages, and miscellaneous composite mechanisms. Prerequisite, Freshman Mathematics. 2 s.h.

Mr.
183-184. Elementary Thermodynamics and Heat Engines.-Introduction to the principles and applications of thermodynamics. A study of the properties of steam and the equipment for its generation and utilization, with some time spent on the internal-combustion engine. Inspection trips are made to neighboring power plants. Prerequisites, Physics 53-54, Mathematics 25,30 (or concurrent). 6 s.h.

Mr.

## DEPARTMENT OF ELECTRICAL ENGINEERING

## Asbury Building <br> PROFESSORS SCHEALER AND SEELEY

151-152. Principles of Electrical Engineering.-An elementary course covering direct and alternating currents and the fundamental principles of direct and alternating current machinery. This course serves as a gencral introductory course for electrical engineering students. Prerequisites, Physics $53-54$, Mathematics 25,30 (or concurrent). 8 s.h.

Mr. Sefley
152. Principles of Electrical Engineering.-A short elementary course covering the principles of direct current and alternating current machinery, especially designed for students in civil engineering. Prerequisite, Physics 53-54. 3 s.h.

Mr. Schealer
135. Principles of Electrical Engineering: Advanced Direct Current Machin-ery.-A study of the principles which underlie the design and operation of all types of direct current machinery. Prerequisites, course 151-152, Mathematics $25,30.3$ s.h. Mr. Schealer
157. Principles of Electrical Engineering: Advanced Alternating Currents.The algebra of vectors and complex quantities used in electrical engineering. An advanced course in alternating currents and alternating current circuits. Prerequisites, course 151-152, Mathematics 25 , 30. $\mathbf{z}$ s.h. Mr. Schealer
154. Principles of Electrical Engineering: Advanced Alternating Current Machinery.-The principles underlying the construction and operation of alternating current machinery. A study of synchronous generators and motors, parallel operation of alternators, polyphase and single phase induction motors, series and repulsion motors, synchronous converters, static transformers. Prerequisite, course 157. 6 s.h. Mr. Schealez
159. Electric Power Transmission.-A course of lectures and recitations on the factors involved in the transmission of electrical energy over long distances and the use of hyperbolic functions in the solution of transmission line problems. Concurrent with course 157. Prerequisite, course 151-152. 3 s.h.

Mr. Schealirr
156. Electric Railways.-A course of lectures and recitations relating to the construction, operation, and equipment of different types of electric railways. Prerequisites, courses 151-152, 155. 3 s.h.

Mr. Schealer
161-162. High Frequency Alternating Currents.-An advanced course on the principles of wire and wireless communication. A thorough study is made of the theory of coupled circuits, antenna radiation, wave propagation over metallic circuits, nature of speech and sound, vacuum tubes, vacuum tube circuits, wire and wireless telephone circuits. Prerequisite, Mathematics 231.6 s.h.

Mr. Seeley
158. Electric Power Stations.-A course of lectures and recitations pertaining to the design, construction and operation of electric power stations, both steam and hydraulic. Consideration of prime movers; generating machinery; powdered fuel and stoker equipment; switchboards; instruments and protective devices; operation and management; visits to neighboring plants. Prerequisites, courses 151-152, 183-184. 3 s.h.

Mr. Schealez

## DEPARTMENT OF ENGLISH

Professors brown, gilbert, white, baum, hubbell, Greene,* and chase,
associate professor mitchell, messrs. Jordan, blackburn, $\dagger$ patton,
Ward, gregory, and sucden, mrs. vance, and mrs. white
Odd-numbered courses are offered in the first semester, even-num-
bered courses in the second.

* Absent on leave, 1929-1930.
$\dagger$ Absent on leave, 1930.31.

1-2. English Composition and English Poetry.-During the first semester the work of the course consists chiefly of composition; during the second term it is divided between the study of literature and writing. 6 s.h. Associate Professor Mitchell, Messrs. Jordan, Blackburn, Patton, Ward, Gregory, and Sugden, and Mrs. Vance
Students who receive a grade of 75 or more in the work of composition of both semesters and a grade of 75 or more in the work in literature are transferred on recommendation of their instructors to sections of English 5-6 for work in English during their sophomore year. Those whose grades in the work of composition of both semesters fall between 70 and 75 are transferred for work in English during their sophomore year to sections of English 3-4. Those students who do not earn a grade of 70 in composition during the first semester are required to continue the study of composition during the second semester; if they earn the passing grade of 70 or more in the work of composition at the end of the second semester, they receive credit for the first half-year of work, and during their sophomore year they do the work of the second semester of English 1-2. Students whose grades in the work of composition for both semesters fall below 70 must repeat the entire course during their second year.

3-4. English Composition.-A second course in composition for Sophomores. 6 s.h. Mr. Jordan

Students who are required to take English 3-4 may take English 5-6 as an elective.

5-6. Prose Literature.-This course consists of a reading and study of selected works of the best writers of prose. Lectures are given on the lives of the authors studied, the periods of literary history, and the origin and growth of the various types of prose literature. Special emphasis is placed upon the study of biography. 6 s.h.

Professor Greene, Messrs. Blackburn and Patton, and Mrs. Vance and Mrs. White
English 5-6 or 3-4 is required of all Sophomores ; English 5-6 is open as an elective to all undergraduates who do not take it as a required course. Sophomores who passed English 1-2 with recommendation to sections of English 5-6 may take 3-4 as their required English in their second year and carry English 5-6 as an elective. English 5-6 or its equivalent is required of all students who do their major work in English.

101-102. Composition.-This is a practical course for students who desire a greater mastery of and facility in the use of the language than they get from English 1-2 and 3-4. 6 s.h. Professor Mitchell

A student may take English 101 only, but only in rare instances may a student enroll in English 102 without having had English 101. Students who wish to take the other courses in composition must have credit for at least 101. Students who wish to take this course must have made a grade of 75 or more in English 1-2, or they must have credit for English 1-2 and English 3-4. The number of students in this course is limited to thirty, and all must have the consent of the instructor.

103-104. Composition.-This course offers further study and practice in composition to those who have done especially good work in English 1-2 and in English 3-4. 6 s.h.

Professor Hubbell
Students who enroll for this course must have the consent of the instructor, and they should have credit for both English 101 and 102; however, a student may enroll for either semester of course 103-104 without having had English 102.
[Not offered in 1930-31]
119. Stage Problems.-This course deals with all phases of play-producing, lighting, scenery, costuming, directing, and similar problems. 3 s.h.

Professor
[Not offered in 1930-31]
120. History of the Theatre.-This course deals with methods of playproduction in the various historical periods of dramatic literature. 3 s.h.

Professor
[Not offered in 1930-31]
121. Play-Producing.-This is a course in the actual presentation of plays. Attention is given to voice-cultivation, stage-business, and other problems. 3 s.h.

Professor
[Not offered in 1930-31]
122. Srecial Problems in Play-Production.-This course continues the work of English 121. Emphasis is placed on the presentation of plays representative of the various periods of dramatic history. 3 s.h.

Professor
[Not offered in 1930-31]
123-124. Shakespeare.-All of Shakespeare's plays are read; nine are studied critically in class. 6 s.h.

Professor Brown
125-126. English Literature, 1798=1832.-This course consists of a study of representative English writers of prose and poetry from Wordsworth to Tennyson. 6 s.h.

Mrs. White
127-128. English Literature, 1832-1900.-This course consists of a study of the prose and poetry of the period, with special emphasis on the works of Tennyson and Browning. 6 s.h. Professors Greene and Chase

129-130. The History of the Novel in England.-6 s.h. Mrs. Vance
131. The Drama, 1770-1892.-3 s.h.

Professor Hubbell
132. The Drama, 1892-1928.-3 s.h.

Professor Hubbell
133. Contemporary Poetry and Verse-Writing.-Beginning with a study of the elements and technique of poetry, this course proceeds to a general survey of twentieth-century poetry, giving special attention to the various modern forms and tendencies. 3 s.h. Professor White

No student may enroll in this course without the consent of the instructor; only a small number can be admitted.

[^18]134. Contemporary Poetry and Verse-Writing.-The work of this course consists chiefly of the writing of verse by members of the class and of criticism of the manuscripts by the class. 3 s.h. Professor White

Prerequisite, English 133.
No student may enroll for this course without the consent of the instructor; only a small number can be admitted.

135-136. Critical Study of Literary Masterpieces.-The first semester is devoted mainly to the essay and related forms; the second, to other types, including narrative a: 1 lyric poetry, the novel, and the short-story. 6 s.h.

Professor Baum
137-138. American Literature.-This course consists of wide reading in American prose and poetry. 6 s.h.

Professor Hubbell
201-202. Anglo-Saxon.-This course requires no previous study of Anglo-Saxon. The first semester is given to a study of Anglo-Saxon grammar and to the reading of Anglo-Saxon prose; the second semester, to the reading and interpretation of Beowulf. 6 8.h.

Professor Brown
203-204. Chaucer.-6 s.h.
Professor Baum
205-206. Middle English.-This course consists of an introduction to the study of early Middle English literature and of a study of the history of the English language. 6 s.h.

Professor Baum
Students may elect English 205-206 without having studied either Anglo-Saxon or Middle English.
[Not offered in 1930-31]
207-208. English Literature, 1400-1550-6 s.h. Professor Baum
209-210. English Romances.-This course consists of a rapid reading of the chief romances of the Middle English period. 6 s.h.

Professor Baum
[Not offered in 1930-31]
211. English Literature, 1550-1625.-This course considers the most important non-dramatic literature from 1550 to 1625 except the works of Spenser. 3 s.h.

Professor Gilbert
212. English Literature, 1625-1660.-This course considers the most important works other than drama from 1625 to 1660 except the works of Milton. 3 s.h.

Professor Gilbert
213-214. The Ballad and Other Folk-Lore.-This course consists of an extensive study of the ballad and other ancient and modern folk-somgs and of the other fifteen kinds of folk-lore as found in North Carolma and other sections of America. Much of the material used in the course is in manuscript form, and still other material studied is that collected by the class during the year; thus the student gets training in collecting and classifying songs and other forms of folk-lore. Each student is assisted in developing some subject pertaining if possible to conditions in his native section. 6 s.h.

Professor Brown

215-216. The Drama of the Elizabethan Period.-A study of the drama in England from its beginnings to 1640 . 6 s.h. Professor Gilbert

217-218. Spenser and Milton.-An exhaustive study of the works of Spenser and Milton. Professor Gilbert
[Course 217 will be offered the second semester, 1930-31]
219. English Literature, 1660-1744.-3 s.h. Professor White
220. English Llterature, 1744-1798.-3 s.h. Professor Whitr
221. The Drama in England, 1640-1770.-3 s.h. Professor Baum
[Not offered in 1930-31]
223-224. Studies in the Romantic Poets of the Early Nineteenth Centary.This course considers in an exhaustive manner the works of some of the Romantic poets. 6 s.h. Professor White

225-226. Studies in Victorian Literature.-This course considers in an intensive way the works of some of the most important writers of the period. 6 s.h.

Professors Greene and Cease
227. Literary Criticism.-A history of literary criticism to 1700 . $\mathbf{3}$ s.h. Professor Gilbert
228. Literary Criticism.-A history of literary criticism from 1700 to the present. 3 s.h.

Professor Gilbert
229-230. American Literature.-This course considers in an exhaustive manner the works of some of the American writers. 6 s.h.

Professor Hubbell
231-232. The Teaching of Literature and Composition in the High School.This course is intended especially for those students who expect to teach in the high schools and for teachers in the city or county who desire instruction in the teaching of English. The work of the course includes consideration of methods and aims in the study of literature and the writing of English, the nature and values of the various kinds of literaature, the planning of the high-school course, and the study of the most important English classics in the high school curriculum. 6 s.h.

Professor Gilbert
This course is open also to teachers with experience.
[Not offered in 1930-31]

## ARGUMENTATION AND PUBLIC SPEAKING

> FOR SOPHOMORES, JUNIORS, AND SENIORS
151. Public Speaking.-A course in the fundamentals of public speaking with emphasis upon the effective presentation of ideas. 3 s.h.
152. Argumentation.-A course dealing with the principles of argumentation and debating with special emphasis upon brief-making and prac-tice-speaking. Public questions are studied as parallel work. 3 s.h.

Mr. Herring

## DEPARTMENT OF GERMAN

PROFESSORS WANNAMAKER, KRUMMEL, AND VOLLMER, ASSISTANT
PROFESSOR WILSON, AND DR. SHEARS
The Department of German attempts in the courses offered below to meet the needs of two classes of students, those intending to make a systematic and prolonged study of the German language and literature and those wishing to acquire a ready reading knowledge of modern German prose. The opportunity to write a great many exercises and see them cartfully corrected, to take frequent dictations in German, and to hear the language spoken a part of each recitation-hour in the elementary courses ought to enable the student to understand a connected lecture in

German 1-2 and 3-4 are prerequisites for course 109-110 and all subsequent courses.

Odd-numbered courses are offered in the first semester, even-numbered courses in the second semester.

FOR ALL STUDENTS
1-2. Elementary German.-Pronunciation, grammar, and translation; dictation, easy prose, and poetry. 6 s.h.

Professors Wannamaker, Krummel, and Vollmer, Assistant Professor Wilson, and Dr. Shears

3-4. Intermediate German.-Grammar and composition; dictation; spoken German ; reading of narrative and dramatic prose. $6 \mathbf{s . h}$.

Professor Krummel, Assistant Professor
Wilson, and Dr. Shears
PRIMARILY FOR STUDENTS OF SCIENCE
107-108. Scientific German.-The translation and, as soon as possible. the reading without translation of modern scientific prose. 6 s.h.

Professor Wannamaker
PRIMARILY FOR JUNIORS
109-110. German Prose Fiction.-Origin and development of the German novel; reading and discussion of typical selections from representative authors of the various literary movements of the nineteenth century. Lectures and reports. 6 s.h. Professor Krummel

111-112. Introduction to the Classic Drama.-Selected plays from Lessing, Schiller, Goethe, and Kleist. 6 s.h. Assistant Professor Wilson
[Not offered in 1930-31]
113. Masterpieces of German Prose.-Brilliant, powerful prose from such geniuses as Heine, Grillparzer, and Kleist. 3 s.h.

Assistant Professor Wilson
114. German Lyrics and Ballads.-A study of one of the richest fields of German literature. 3 s.h.

Assistant Professor Wilson
115-116. German Drama of the Nineteenth Century.-A study of the leading dramatists from Kleist to Hauptmann. Lectures, collateral reading, and reports. 6 s.h.

Professor Krummel
[Not offered in 1930-31]
FOR JUNIORS AND SENIORS
117-118. Advanced Composition: Conversation.-Grammar-review, oral and written composition in German. Recommended for those who are specializing in German. 6 s.h.

Professor Krumamel
[Not offered in 1930-31]
119-120. Great Epochs in German Literature.-The great epochs in German literature studied through English translations. Lectures, discussions, and collateral reading. (No knowledge of German required.) 3 s.h. if taken in only one semester. 6 s.h. Professor Volimer

## FOR SENIORS AND GRADUATES

201-202. Goethe.-This course is intended to acquaint the student with the methods of independent research while making a careful study of the author's most important works, with special emphasis upon the broader aspects of his ever-widening interests and literary activities. 6 s.h.

Professor Krummel
203-204. Leibnitz to Romanticism.-Eighteenth century German literature in its relation to contemporary European philosophy. Lectures, collateral reading. 6 s.h.

Professor Vollmer
205-206. Middle High German.-The language and literature of Germany's first classical period. Grammar and translation. First semester: Wright's Middle High German Primer, and Der arme Heinrich. Second semester: Das Nibelıngenlied, Tristan und Isolde, or Parzival. 6 s.h. Professor Vollmer

## DEPARTMENT OF GREEK

PROFESSOR PEPPLER, ASSISTANT PROFESSOR JOHNSON,* AND Mr. Truesdale
Courses 121-122, 141-142, and 131 are entirely in English and require no knowledge of the Greek language. The purpose in offering them is to give a wider circle of students some conception of the debt which modern civilization owes to the Greeks.

Odd-numbered courses are offered in the first semester, even-numbered in the second semester.

1-2. Course for Beginners.-6 s.h.
Mr. Truesdale
Open to all students.

[^19]3-4. Xenophon.-Anabasis, Books I-IV. 6 s.h.
Assistant Professor Johnson
Open to students who offer one unit of Greek for admission and to those who have completed course 1-2.

105-106. Homer.-Iliad, Books I-V1. 6 s.h. Professor Peppler
Open to students who offer two units of Greek for admission and to those who have completed courses 1-2 and 3-4 or their equivalent.

107-108. Plato.-Apology, Crito, and selections, together with collateral reading in the Memorabilia of Xenophon and in the Clouds of Aristophanes. Euripides.-One play, to serve as an introduction to Greek tragedy. 6 s.h.

Professor Peppler
Open to students who offer three units for admission and to others who have completed the required preliminary work.

117-118. Greek Prose Composition.-The character of this course is determined by the needs of the students who elect it. 2 s.h.

Professor Peppler
121-122. Greek Literature in English Translations.-The purpose of this course is to give a general survey of the life and civilization of the Greeks, especially to those who have never studied the language but wish to become acquainted with some of the choicest portions of the literature by the use of translations. It is, however, open as an elective to all Juniors and Seniors, whether they know Greek or not. First, the Iliad and the Odyssey are read in translation and illustrated with stereopticon views of the excavations and discoveries at Troy and other cities of the Mycenean age; then, many of the extant plays of the three great tragic poets are studied in English translations. 6 s.h.

Professor Peppler
The student may elect course 122, whether or not he has taken course 121.

141-142. Greek Art.-Illustrated lectures, study of the textbook, and other assigned reading. For the sake of historical perspective, a cursory account of art in the Stone Ages and in Egypt and Mesopotamia is given at the beginning of the course ; then, some time is devoted to the art of prehistoric Greece. The principal objects of study are the sculpture and architecture of classic Greece. No knowledge of Greek is required. Open as an elective to Juniors and Seniors. 6 s.h.

Assistant Professor Johnson

Greek 131-Latin 132-Classical History.-First semester: History of Greece with brief introduction dealing with Oriental nations. Second semester: History of Rome. May be counted for credit either as Greek or as Latin or as History. Required of Greek majors. 6 s.h.

Professor Anderson

FOR SENIORS AND GRADUATES
201-202. Greek Drama.-Selected plays are read, and their dramatic construction and distinctive features are discussed. 6 s.h.

Professor Peppler
203-204. Homer.-Odyssey. Pindar and Bacchylides. 6 s.h.
Professor Peppler
205-205. Greek Historians.--Herodotus, Books VII and VIII; Thucydides, Books VI and VII. 6 s.h.

Professor Pepplek
207-208. Greek Orators.-Selected speeches. 6 s.h.
Professor Peppler
243. Greek Archaeology.-The topography and monuments of Athens are studied, and other matters supplementary to course 141-142 are presented. Course 243 is intended primarily for students who wish to prepare themselves for study in Greece or for work toward an advanced degree. Courses 105-106 (or the equivalent) and 141-142 are prerequisites. 3 s.h.

Assistant Professor Johnson
244. Greek Epigraphy.--The history of the alphabet is studied, and important inscriptions are read for their content. Prerequisite, Greek 107108 or the equivalent. 3 s.h. Assistant Professor Johnson

## DEPARTMENT OF HISTORY

PROFESSORS BOYD, LAPRADE, AND RIPPY, ASSOCIATE PROFESSORS SHRYOCK, CARROLL, AND BALDWIN, ASSISTANT PROFESSOR NELSON, $\dagger$ DR. LaNNiNG, MESSRS. MCCLOY,* MANCHESTER, AND WOODY
The courses in history are designed (1) to give a comprehensive survey of modern European and American history; (2) to provide for a more detailed study of certain phases of English, American, and His-panic-American development; (3) to give some knowledge of the problems and resources of the general reader and the teacher of history.

Course $1-2$ is a prerequisite for all other courses, and one course in addition is required of all who wish to elect course 204 ; courses 9 and 91 are prerequisite for courses $113,114,119,120$. Sophomores who took only one semester of course 1-2 in the freshman year may be admitted to courses 9 and 91 or 16 provided they made a grade of 85 or above on the semester taken. Courses offered for Seniors and Graduates are limited to twenty-five students; Juniors may not elect them without special permission from the department and the Council on Graduate Instruction.

Courses are offered throughout the year unless otherwise specified.

[^20]
## FOR FRESHMEN AND SOPHOMORES

1-2. Modern and Contemporaneous Europe.-In this course the development of modern Europe since the middle of the century is traced with special reference to the rise of nationality, the industrial revolution, scientific thought, domestic politics in the leading states, colonial expansion, diplomacy, and the World War. 6 s.h.

Associate Professors Shryock, Carroll, and Baldwin, Assistant Professor Nelson, Dr. Lanning, Messrs. McCloy, Manchester, and Woody

## PRIMARILY FOR SOPHOMORES AND JUNIORS

9. Political and Social History of the United States to 1800.-A general survey of the development of the United States in which effort is made to place the proper emphasis on underlying economic or other causes of political and social progress. Required readings in the Yale Chronicles of America with the presentation of book reviews and one research paper. First semester. 3 s.h. Professor Rippy and Dr. Lanning
10. Political and Social History of the United States, 1800 to 1860.-This course completes the work begun in 9. Second semester. 3 s.h.

Professor Rippy and Dr. Lanning
16. The Development of Modern Europe.-This course is designed as a guide to the study of the forces that have produced Europe as it is today, starting with the Renaissance and the Reformation. 6 s.h.

Associate Professor Carroll
This course is not open to students who take course 101-102.

## FOR JUNIORS AND SENIORS

101-102. Western European Civilization.-This course is a study of the development in Western Europe of the familiar institutions and culture of modern society. $6 \mathrm{~s} . \mathrm{h}$.

Assistant Professor Nelson
Sophomores who made an average grade of 85 or more on course 1-2 may also be admitted to this course. It is not open to those who have had or are taking course 16.
113. History of the United States since 1860.-A continuation of courses 9 and 91. The Civil War and its results, the evolution of reconstruction policies, cultural, political, and economic development since 1876, the World War, and post-bellum problems. First semester. 3 s.h.

Dr. Lanning
Prerequisites, courses 9 and 91.
114. History of the United States Foreign Policy.-This course traces the history of American Diplomacy since 1789. Second semester. 3 s.h.

Professor Rippy
Prerequisites, courses 9 and 91.

Greek 131-Latin 132-Classical History.-See Department of Latin and Roman Studies.
119. Social and Economic History of the American People.-Particular attention is given to the relationship between economic forces and such phases of social life as the family, morals and customs, immigration, crime and punishment, amusements, public opinion, and public health. 6 s.h.

Associate Professor Shryock
Prerequisites, courses 9 and 91.
120. The Church in American History.-Among the subjects considered are the relation of theology and church government to political theory and practice, the social and political results of the Great Awakening and of ecclesiastical controversies, the part played by the Church in the American Revolution and in the making of state constitutions, in education, westward expansion, in the reform movements of the nineteenth century, labor controversies, the Civil and World Wars, and internationalism. 6 s.h.

Associate Professor Baldwin
Prerequisites, courses 9 and 91.
124. English History.-A survey of transitions in the political institutions and social development from the Norman Conquest to the present. 6 s.h.

Professor Laprade

## FOR SENIORS AND GRADUATES

203. The Union, Confederacy, and Reconstruction.-The subjects considered are the rise of secession, the constitutional and economic problems of the Union and Confederacy, and the political and economic adjustments during reconstruction. First semester. 3 s.h.

Professor Boyd
[Not offered in 1930-31]
204. English Constitutional History.-After a brief review of the AngloSaxon period, a detailed study is made of those medieval institutions which form the basis of the British constitution. This is followed in the second semester by a general survey of the changes wrought in English political history during the seventeenth and eighteenth centuries, the main lines of constitutional development since 1800 , and an outline of the British government as it exists today. 6 s.h.

Professor Laprade
[Not offered in 1930-31]
210. Constitutional History of the United States, 1763 to 1860.-Among the subjects considered are the issues and nature of the Revolution, the problems of the confederation, the nature of the constitution in the light of its early interpretations, the rise of political parties, sectionalism and its attendant political and economic interests, and the slavery controversy. 6 s.h.

Professor Boyd
[Not offered in 1930-31]
212. The Teaching of History and Civics (Education 226).-This course consists of informal discussions, based upon collateral reading and observation work of such topics as aims, tests for values, the social-studies curriculum, class-room procedure, course and lesson planning, etc. The class is limited in numbers to fifteen, admission being made only after consultation with the instructor, preferably during the preceding spring. Only such Seniors are admitted as are thinking seriously of teaching history in the high schools, who have taken at least eighteen hours of history in college, and who expect to qualify for a North Carolina Grade A teaching certificate. These qualifications, however, do not necessarily apply to graduate students, who may be admitted upon consultation with the instructor at the beginning of the fall term. 6 s.h.

Associate Professor Shryock
217. Europe since 1870.-International relations since the Franco-German War is the chief subject of study in this course; special emphasis is placed upon the underlying economic and political influences. 6 s.h. Associate Professor Carroll
218. The History of the European Proletariate.-This course is concerned chiefly with the origins, expansion, and organization of the industrial working classes of Europe. The following problems are emphasized: the decline of serfdom, the growth of an urban working class and social revolutions in England, France, and Germany prior to the eighteenth century, the results of the Industrial Revolution, and labor movements and theories during the nineteenth and twentieth centuries. $6 \mathrm{~s} . \mathrm{h}$.

Associate Professor Carroll
[Not offered in 1930-31]
222. Early Modern History.-A survey of the social and political changes in Western Europe during the fourteenth and fifteenth centuries, the Protestant Revolt and the Catholic Reaction of the sixteenth century, and the rise of toleration. 6 s.h. Assistant Professor Nelson [Not offered in 1930-31]
223. Medieval Institutions and Culture.-A consideration of the classical heritage, the Germanic infusion, development of ecclesiastical, feudal, monarchical and communal institutions, relations of Church and State, the rise of universities, vernacular literatures, philosophy and art, in the period 300-1300 A.D. 6 s.h.

Assistant Professor Nelson
230. The History of North Carolina.-The evolution of the commonwealth from its origins to the present is traced with particular emphasis on social conditions and the recent period. Second semester. 3 s.h.

Professor Boyd
[Not offered in 1930-31]
231. The Hispanic-American Republics.-A survey of the political, economic, and social development of the Hispanic-American nations since the beginning of the movement for independence in 1810. Considerable attention is also given to the foreign commerce and foreign relations of these nations. First semester. 3 s.h.

Professor Rippy
232. The Hispanic Colonies of the New World.-The development of the Iberian states as colonizing powers, the work of the conquerors, the Spanish colonial policy and system, their influences and results, native races, the international contest for supremacy, and the decay of Spanish power in America and the Philippines. Second semester. 3 s.h.

Dr. Lanning

## DEPARTMENT OF LATIN AND ROMAN STUDIES

## PROFESSORS ROSBOROUGH AND ANDERSON, ASSISTANT PROFESSOR GATES, AND MR. SLEDD

Students who present for entrance less than the four standard units of high school Latin may make up the deficiency by taking the requisite courses from Latin 1-2 and Latin 3-4. These courses are by no means designed to supplant the teaching of Latin in high school.

Major: a minimum of thirty semester-hours which must include Latin 11, 12, 13, 14, 15-16, 17-18, the balance to be chosen from courses numbered above 100 and including Greek 131, Latin 132. In a teaching major Latin 109 must be included. All Latin majors are strongly recommended to get at least an elementary knowledge of Greek.

Odd-numbered courses are offered in the first semester and even-numbered courses in the second semester.

FOR ALL STUDENTS, PRIMARILY FOR FRESHMEN AND SOPHOMORES
1-2. Elementary Latin.-Forms, constructions, vocabulary, English derivatives. Open to all students. Those who present only one unit of Latin for entrance must attend the course from the beginning, but will receive credit only for the second semester's work. Those who satisfy the entrance requirement in foreign language by presenting four units of languages other than Latin may count the course for college credit on completing Latin 3-4. 6 s.h.

3-4. Intermediate Latin.-First semester: four orations of Cicero. Second semester: at least four book of Vergil's Aeneid. Prerequisite: two units of entrance Latin or Latin 1-2. Students presenting three units of Latin for entrance are strongly advised to attend the first semester, Latin 3, for review, but will receive only five semester-hours credit on completing Latin 4. 10 s.h.
11. Roman Comedy.-At least three plays of Terence. Prerequisite: four units of entrance Latin or Latin 3-4. 3 s.h.

Professor Anderson and Assistant Professor Gates
12. Roman Lyric Poetry.-The Odes and Epodes of Horace. 3 s.h. Professor Anderson and Assistant Professor Gates
13. Catullus.-Prerequisite: Latin 11 and 12, 3 s.h.

Professor Rosborough
14. Sallust and Tacitus.-The Agricola and Germania of Tacitus with comparative study of the historical monograph as seen in the Jugurtha and Catiline of Sallust. 3 s.h.

Professor Rosborough
15-16. Latin Composition.-Prerequisite or concurrent: Latin 11 and 12. One hour throughout the year. 2 s.h. Professor Rosborough

17-18. Sight Reading in Mediaeval Latin.-One period of one and onehalf hours per week throughout the year. Prerequisite: Latin 11 and 12. Recommended to students of Medieval Institutions and Culture (History 223). No outside preparation required. 2 s.h. Professor Rosborough

FOR JUNIORS AND SENIORS
101. Tacitus and Suetonius.-
[Not offered in 1930-31]
102. Roman Satire.-Horace and Juvenal.
[Not offered in 1930-31]
103. Roman Elegiac Poetry.-Selections from Tibullus, Propertius, and Ovid.
[May not be offered in 1930-31]
104. Roman Philosophy.-Lucretius: De Rerum Natura, selections from Books I, II, III, and V. 3 s.h.
[May not be offered 1930-31]
105. The Roman Epigram.-Martial: the development of the epigram before him; his significance in the history of the epigram and for the age of Domitian; his influence traced down into the modern world. 3 s.h.

Professor Rosborough
106. Letters of Pliny the Younger.-Study of the society and institutions of his time. 3 s.h.

Professor Rosborough
109. Materials and Methods.-A study of Latin in the secondary school curriculum. Course for prospective teachers of high school Latin; required of Latin teaching majors. Prerequisite: eighteen approved se-mester-hours of college Latin including Latin 11, 12, 13, 14. 3 s.h.

> Professor Rosborough or Professor Anderson

COURSES OF GENERAL INTEREST
111-112. Latin Literature in English Translation.-
[Not offered in 1930-31]
113-114. Roman Civilization.-
[Not offered in 1930-31]

Greek 131-Latin 132-Classical History.-First semester: History of Greece with a brief introduction on Oriental nations. Second semester: History of Rome. May be counted for credit either as Greek or as Latin or as History. 6 s.h.

Professor Anderson
117-118. Introduction to Roman Archaeology and Art.-
[Not offered in 1930-31]

## FOR SENIORS AND GRADUATES

201. Roman Fiction.--Petronius and Apuleius; the Milesian tale and its influence.
[Not offered in 1930-31]
202. Early Latin Christianity.-Readings in Tacitus, Pliny, Minucius Felix, and the church fathers.
[Not offered in 1930-31]
One of the two following year-courses 203-204 or 205-206 will be offered in 1930-31:

203-204. Epic Poetry.-Vergil and a study of the Greco-Roman epic as culminating in him. Throughout the year. 6 s.h.

Assistant Professor Gates
205-205. Roman Dramatic Literature.-Select Comedies of Plautus and Terence; select Tragedies of Seneca. Rapid reading course. Throughout the year. 6 s.h.

Assistant Professor Gates
209-210. Vulgar Latin and Introduction to Romance Philology.-Prerequisite : Latin 11 and 12 and not less than two years of college French or college Spanish. Throughout the year. 6 s.h.

Professor Rosborough
For courses for Graduates see the announcement of the Graduate School.

## DEPARTMENT OF MATHEMATICS

PROFESSORS FLOWERS, MARKHAM, RANKIN, AND ELLIOTT, ASSISTANT PROfessors patterson, robison, Aldridge, hickson, and miles, MESSRS. ARNOLD AND DRESSEL, AND ASSISTANTS

Unless otherwise specified, odd-numbered courses are offered the first semester and even-numbered courses the second semester.

## 1. College Algebra.-Each semester. 3 s.h.

Staff
This course is required of all students. Students found deficient in elementary algebra may be required to retiew this before registering for course 1 .
2. Plane Trigonometry.-Each semester. 3 s.h.

Prerequisite, except by special permission of the department, course 1 . Course 2 is required of all students.
5. Plane Analytic Geometry.-Each semester. 3 s.h. Staff Prerequisite, course 2.
10. Engineering Mathematics.-This course, given for engineering freshmen, includes courses 1,2 , and 5. 10 s.h. Staff
16. Solid Geometry.-Given second semester on sufficient demand. 3 s.h.

Stapf
This course carries elective credit only.
21. Mathematics of Investment.-An elementary course dealing with simple and compound interest, annuities certain, amortization, sinking funds, depreciation, evaluation of bonds, and life insurance. 3 s.h.

Assistant Professor Hickson
Prerequisites, courses 1 and 2.
25. Differential Calculus.-Each semester. 4 s.h.

Staff Prerequisite, course 5.
30. Integral Calculus.-Each semester. 4 s.h.

Staff
Prerequisites, courses 5 and 25.
201. History of Mathematics.-This course deals with the evolution of the following topics: number system, arithmetic, geometry, algebra, trigonometry, analytical geometry, calculus, modern geometry. Brief sketches of the lives of the builders of mathematics will be given. 3 s.h.

Profeseor Rankin
Prerequisite, course 30.
204. Teaching of Mathematics.*-This course is designed primarily for those who intend to teach high school and college mathematics. It deals with the recent changes in methods of studying mathematics. 3 s.h.

Professor Rankin
Prerequisite, course 30.
225. Theory of Equations and Determinants.-3 s.h.

Assistant Professor Patterson
Prerequisite, course 25.
231. Differential Equations.-A study of the more common types of ordinary differential equations. Primarily a problem course for engineers. 3 s.h. Professor Elliott

Prerequisite, course 30.
235. Modern Higher Algebra.-A study of linear dependence, solution of a set of linear equations. Study of matrices, linear transformations, invariants of linear transformations, bilinear forms. Either semester. 3 s.h. Assistant Professor Robison Prerequisite, course 25.

[^21]239-240. Advanced Calculus.- This course is a study of the processes of the calculus, their meanings and applications. It is designed to furnish a necessary preparation for advanced work in analysis and applied mathematics. 6 s.h.

Professor Elliott
Prerequisite, course 30.
250. Modern Geometry.-Modern geometry of the triangle, transversals, harmonic sections, harmonic properties of the circle, inversions, poles, polars, etc. Valuable to teachers of high school geometry. 3 s.h.

Professor Rankin
Prerequisite, course 25.
255-256. Projective Geometry.—The elements of projective geometry treated synthetically. Introduction to homogeneous coördinates with application to projective geometry. Study of different types of collineations. 6 s.h.

Assistant Professor Robison
Prerequisite, course 25.
259-260. Analytic Geometry of Space.-The usual topics treated in cartesian and homogeneous coördinates. An introduction to differential geometry is included. 6 s.h.

Professor Elliott
Prerequisite, course 25.
275. Probability.-Introductory course. Combinatory analysis, mean values, Bernoulli's theorem, the probability integral, statistics. 3 s.h.

Assistant Professor Miles
Prerequisite, course 30.
276. Probability.-Continuation of course 275. Geometrical probability, probability of causes, theory of errors, applications. 3 s.h.

Assistant Professor Miles
280. Fourier's Series and Spherical Harmonics.-The properties of Fourier's Series and spherical harmonics with application to problems of mathematical physics. Either semester. 3 s.h.

Assistant Professor Robison
Prerequisite, course 30.
284. Vector Analysis.-This course is a study of the different vector products and the calculus of vectors, with applications to geometry and mechanics. 3 s.h.

Professor Elliott
Prerequisite, course 30.

## DEPARTMENT OF PHILOSOPHY

PROFESSORS CRANFORD AND ———AND ASSISTANT PROFESSOR RHINE
Odd-numbered courses are offered in the first semester, even-numbered courses in the second semester.
101. Introduction to Philosophy.-This course is intended to acquaint the students with the nature of philosophical problems and to show how they arise in the mind of the individual. Psychology 101, or its equivalent is a prerequisite for this course, except by special permission. Lectures, assigned readings with reports. 3 s.h. Professor Cranford
102. History of Philosophy.-This course gives a general survey of the field of philosophy and considers the leading historical solutions of philoscphical problems. Prerequisite, Psychology 101, or its equivalent. Text, lectures, assigned readings with reports. 3 s.h. Professor Cranford
105. Logic.-A study of the fundamental principles underlying all reasoning, both deductive and inductive, and their application in scientific methods of thinking. Textbook, lectures, and assigned readings. 3 s.h.

Professor Cranford
107. An Outline History of Science.-A review of the origin and development of the modern sciences. A general history of scientific method, of the achievement by mankind of analytical and experimental ways of thinking. Two lectures and one discussion hour. 3 s.h.

Assistant Professor Rhine
203. The Philosophy of Conduct.-This course attempts a critical inquiry into the fundamental concepts and principles of human conduct. These are approached from the standpoint of nature, psychology, and philosophy. It analyzes the content of moral consciousness and seeks to find the laws that rule in the realm of virtue and finally to discover the ultimate nature of the right. Lectures and textbook. Text used: Everett's The World of Values. 3 s.h.

Professor Cranford
204. Christian Ethics.-This course attempts a critical inquiry into the fundamental concepts and principles of conduct in the light of Christianity. It seeks to show the practical application of these concepts and principles in a doctrine of Christian virtue and duties. Lectures and textbook. Text used: Smythe's Christian Ethics. 3 s.h.

Professor Cranford
205-205. Idealism.-A survey of idealistic systems of philosophy, with chief emphasis on the more recent developments in idealistic thinking. Lectures and assigned readings with reports. Prerequisite, Philosophy 101 or 102.6 s.h.

Professor Cranford
208. A Constructive Survey of Modern Science.-An orientation course, designed to present a synthetic view of nature from the data of the modern sciences. It is aimed to be corrective of the tendencies toward over-specialization. Two lectures and one discussion hour. 6 s.h.

Assistant Professor Rhine
109. history of Ancient Philosophy.-A survey of reflection on the nature of man and his place in the world from Thales to Aquinas with emphasis on Plato. Lectures and reports. 3 s.h.

Professor
110. History of Modern Philosophy.-Continuation of the preceding, but may be elected separately. The development of philosophy from Bruno to Herbert Spencer, with Kant as the central figure. Lectures and reports. 3 s.h.

Professor
111. Contemporary Philosophy.-A general inspection of the main currents of present philosophical thought including the realism of Russell and Whitchead, the pragmatism of James and Dewey, and the neo-idealism of Croce and Gentile. Attention will be given to the relation of these schools to the idealism of Bradley and Bosanquet. Reading and discussion. 3 s.h.

Professor
112. Recent Aesthetic.-Study of the chief contemporary views of the nature of art, the intuitionism of Croce, formalism of the art critics, and expressionism of Bosanquet. Reading, analysis of examples, discussion. 3 s.h.

Professor
213-214. Philosophy of the Seventeenth Century.-The center of this course will be a detailed study of Spinoza's Ethics, but attention will be given to his contemporaries, Descartes and Leibniz, and to the contrast between the rationalism of these thinkers and the empiricism of the British philosophers, Locke, Berkeley, and Hume. Lectures and reports. 6 s.h.

Professor
215-216. History of Aesthetic.-The tracing of the historical solutions of traditional problems, such as the nature of imitation, symbolism, the ugly, the sublime, and the comic, the relation of art to nature, to morals, and to economics, the relation of the particular arts to each other, the standard of taste. General theories will be illustrated and tested by examples from the arts. Reading and discussion. 6 s.h.
Professor

## DEPARTMENT OF PHYSICS

## PROFESSORS EDWARDS AND HATLEY, ASSISTANT PROFESSORS COLLINS AND NIELSEN, MR. CARPENTER, AND ASSISTANTS

The first course in physics deals largely with those fundamental facts and theories concerning the physical universe that are supposed to be of interest to every intelligent man, and the matter presented is within the comprehension of every college student.

The courses in physics after the first year are designed to meet the needs of three classes of students: (1) those desiring to specialize in physics with a view to work in teaching or investigation; (2) those intending to pursue the study of medicine, biology, or chemistry; (3) those looking forward to the study of engineering. The work of the first year is designed to lay a broad foundation for subsequent study.

Odd-ntumbered courses are offered in the first semester, even-numbered courses in the second semester.

1-2. General Physics.-This course stresses neither mathematical processes nor exact measurements. It traces historically and experimentally the development of great principles. The class is divided into four groups according to the ability of the students as judged by various tests. For the purpose of laboratory instruction, the entire class is divided into fifteen sections. Three hours recitation and two hours laboratory. 8 s.h. Professor Edwards, Mr. Carpenter, and Assistants

51-52. Advanced General Physics.-A course in general physics designed to prepare students for entrance to medical colleges. Three hours lecture and three hours laboratory. 8 s.h.

Assistant Professors Neilsen and Collins
Prerequisite, course 1-2 or its equivalent.
85-56. Teacher's Physics.-This course is designed primarily for those intending to teach physics in secondary schools. Enough advanced theory is covered to give some perspective, but special emphasis is placed on a study of method, every-day application of principles, construction of apparatus, the mounting of classroom experiments, and on general laboratory technique. 6 s.h.

Assistant Professor —__
Prerequisite, course 1-2 or its equivalent.
5. Household Physics.-A course designed primarily to meet the requirements in physics of students preparing to specialize in domestic science. The course is based on Whitman's Physics of the Household. 3 8.h.

Assistant Professor
If less than ten students elect any one of the three preceding courses, it will not be offered.

53-54. Physics for Engineers.-A course in general physics which gives special emphasis to engineering problems. Open to Sophomores who have completed trigonometry. Four hours recitation and three hours laboratory. 10 s.h.

Professor Hatley and Assistant Professor Collins
The following courses are arranged as undergraduate majors in physics. They require Physics 1-2, or its equivalent, as a prerequisite.
151. Laboratory Physics.-In this course students are taught methods of exact observation and measurement in mechanics, sound, and light. 1 to 3 s.h.

Assistant Professor Collins
152. Laboratory Physics.-A continuation of course 151 into the fields of electricity and magnetism. 1 to $\mathbf{3}$ s.h. Assistant Professor Nielsen
153. Mechanics.-This course covers in a thorough way the more advanced phases of mechanics, which do not require the use of the calculus. 3 s.h.

Assistant Professor Colling
154. Molecular Physics.-A continuation of course 153 into the field of molecular physics. 3 s.h.

Assistant Professor Collins

The following courses are arranged primarily for senior students, but they are open to graduate students. An elementary knowledge of the calculus and credit for 12 semester hours in Physics is presumed in all of the following courses.

201-202. Principles of Radio Transmission and Reception.-A course covering the general theory of wave propagation and including a study of inductance, capacity, induction coils, oscillatory discharge, high frequency generators and transformers, and the various methods of detecting electromagnetic waves. 6 s.h. Assistant Professor Collins

203-204. Analytical Mechanics.-Geometry of motion; kinematics of a particle and of a rigid body; statics, kinetics, of a particle and of a rigid body; relative motion; Lagrange's equations; general principles of mechanics. 6 s.h.

Assistant Professor Collins
205. Physical Optics.-This course is a treatment of the subject of light adapted to the needs of students completing general physics and is of special interest to chemical and pre-medical students. The course is based on Taylor's Advanced Optics. 2 s.h.

Professor Hatley
206. Modern Physics.-A lecture course consisting of a rapid review of the entire field of physics with special emphasis on the outstanding experiments underlying modern physics. 3 s.h. Professor Hatley

207-208. Electricity and Magnetism.-This course covers the fundamental phenomena of direct and alternating currents and magnetism. Starling's Electricity and Magnetism is used as the basis of the lectures. Smith's Electrical Measurements is used as a guide in the laboratory exercises. Two lectures and one laboratory period a week, throughout the year. 6 s.h.

Professor Edwards
[Under special conditions a credit of either 2 or 4 semester-hours may be arranged]
209. Thermodynamics.-Thermodynamics is the science on which is based all of the physico-chemical sciences. This introductory course deals with basic principles freed from all unnecessary complications. Hence it covers neither the theory applied to heat engines nor, in detail, the theory of chemical equilibrium. It is in a sense preparatory to such studies. 3 s.h.

Professor Edwards
[Offered in alternate years with course 207-208]

## DEPARTMENT OF PSYCHOLOGY

PROFESSOR MCDOUGALL AND ASSISTANT PROFESSORS ZENER AND RHINE
101. Introduction to Psychology: General Principles.-Lectures, demonstrations, prescribed reading and reports. 3 s.h.

Professors McDougall and Drs. Rhine and Zener
102. Introduction to Psychology: Experimental and Applied.-A demonstrational introduction to the methods and results of experimental and applied psychology. 3 s.h.

Dr. Zener
110. Logic.-See Philosophy 106. 3 s.h. Dr. Rhine
111. An Outline History of Science.-See Philosophy 107. 3 s.h.

Dr. Rhine

201. Social Psychology.-Lectures, readings, and reports. 3 s.h.

Dr. McDougall
202. Abnormal Psychology.-Lectures, readings, and reports. 3 s.h.

Dr. McDougall
203. Advanced Experimental Psychology.-A laboratory course designed to give first-hand acquaintance with experimental technique and methodology. Six laboratory hours. 3 s.h. Dr. Zener
209. Experimental Psychology: Problems and Theories.-An historical survey of experimental psychology, with a critical study of selected problems and theories. 3 s.h.

Dr. Zener
204. Physiological Psychology: Nerve Conductlon and Reflex Actlon.-A consideration of the functional properties of the nervous system. Two hours lecture, five hours laboratory. 4 s.h.

Dr. Zener
206. Physiological Psychology: Development of Structure.-A study of the structure and function of the central nervous system from the embryological and comparative viewpoints. One hour lecture, six hours laboratory. 4 s.h.

Dr. Zener
[Not offered in 1930-31]
219. Introduction to the Psychology of Rellgion.-See Religion 275. 3 s.h. Dr. Hickman
220. Advanced Psychology of Religlon.—See Religion 276. 3 s.h.

Dr. Hickman
224. A Constructive Survey of Modern Sclence.-See Philosophy 208. 3 s.h.

Dr. Rhine

## DEPARTMENT OF RELIGION

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PROFESSORS RUSSELL, SPENCE, CANNON, ORMOND, BRANSCOMB, MYERS,
    GAREER, GODBEY, HICKMAN, ROWE, AND MRS. SPENCE
        AND MR. LITTLE
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The Department of Religion is divided into several sub-divisions. The purpose is to offer courses through which the college student, especially one looking forward to some form of Christian work, may secure a general view of the field of religion, both in theoretical and practical phases. The prerequisite to all courses in religion is a year's course in the English Bible; all other courses are elective.

Odd-numbered courses are offered in the first semester, even-numbered courses in the second semester.

1-2. Biblical Literature.-This course includes a general survey of the entire Bible. It is required of all students by the end of the sophomore year, except those in Group IV, and of them before graduation. Enrollment in each section is limited to thirty-five. 6 s.h

Professors Myers, Spence, Ormond, Rowe, and Mrs. Spence
[Note: On consent of the instructors, Sophomores may be admitted to courses 103, 104, 131, 141, 142, 161, 162.]
103. The Prophets of the Old Testament.-A general study of the history and nature of Hebrew prophecy; a detailed study of the message of the outstanding pre-exilic literary prophets. 3 s.h. Professor Myers
104. The History and Religion of the Jews to the Roman Period.-Based upon exilic and post-exilic prophecy, wisdom literature, and the earlier apocalypses. 3 s.h.

Professor Myers
131-132. American Christianity.-The aim of this course is to trace the growth of the different branches of the Christian Church in the United States, Canada, and Hispanic-America. Prerequisite, History 1-2 or its equivalent. 6 s.h.

Professor Garber
[Not offered in 1930-31]
141. Introductory Sociology.-This course is of general interest and is designed to introduce the student to the principles and practices of human association. 3 s.h.

Professor Ormond
142. Rural Sociology.-A study of rural conditions in relation to social welfare, existing rural ideals, observation of rural tendencies and movements, and rural betterment through social adjustments. Prerequisite, course 141. 3 s.h.

Professor Ormond
161. Introduction to Religious Education.-Designed to give the student some acquaintance with the tools and methods of modern religious education, the meaning and significance of scientific procedure, and the psychology of learning as it relates to this field. 3 s.h.

Professor Spence
162. Age-Group Characteristics.-A study of the different periods of human life with a view to determining the needs and interests of the pupil at each given stage. 3 s.h.

Professor Spence
201-202. Introductory Hebrew.-A study in the Hebrew language. The reading of the first eight chapters of Genesis inductively. 6 s.h.

Professor Godbey
203-204. Introduction to the Old Testament.-The origin, literary form, and contents of the books of the Old Testament in their historical setting. 6 s.h.

Professor Russell

211-212. Hellenistic Greek.-A course for students who wish to begin the study of the language of the New Testament. Selections from the New Testament will be read in the second semester. 6 s.h.

Professor Branscomb
215. The Life of Jesus.-An attempt to discover the consciousness, purpose, and significance of Jesus as set forth in the Synoptic record. 3 s.h.

Professor Myers
216. The Teaching of Jesus.-An interpretation of the teaching of Jesus, based upon the Synoptics, Matthew receiving principal consideration. 3 s.h.

Professor Myers
217. The New Testament in Greek.-Rapid reading in Greek text of the New Testament. Prerequisite, six semester-hours study of the Greek language. 3 s.h.

Professor Branscomb
218. The Exegesis of Selected Books of the New Testament.-The books studied will be Galatians, Colossians, and Hebrews. The course will be based on the Greek text. 3 s.h.

Professor Russell
213-214. The Beginnings of Christianity.-A survey course dealing with the background, the beginnings, and the early history of Christianity. Special attention is given to the creation of the literature of the New Testament. 6 s.h.

Professor Branscomb
219. Life of Paul.-A study of Paul's life on the basis of Acts and the epistles. Consideration is given to Paul as a man, the factors entering into his character, and his permanent contribution to the world. 3 s.h.

Professor Myers
[Not offered in 1930-31]
233. Church History to the Reformation.-A survey of the growth of the Christian Church from the Apostolic Age to the Reformation. 3 s.h.

Professor Garber
234. History of the Evangelical Movement.-Beginning with the Lutheran Reformation, this course traces the rise, growth, influence, and history to 1800 of the Calvinistic, Anglican, Reformed, Quaker, Baptist, and Methodist movements. 3 s.h.

Professor Garber
251. The Church and Rural Sociology.-A study of the religious, social, educational, and economic conditions of the country; the historical development of the church in the midst of rural social relations; an attempt to discover the present social obligation of the church. $\mathbf{3}$ s.h.

Professor Ormond
252. Rural Church Administration.-This course deals with the functions of the rural church; the minister's attitude toward rural life, his mission to the rural people, as well as his service in managing the organization of and supervising the church program. 3 s.h. Professor Ormond
261. Administration and Supervision of Religious Education.-Deals with problems of administering and supervising the religious education program of the local church. Designed especially to train ministers and other administrative leaders in religious education. Methods of correlation and integration are considered. 3 s.h.

Mr. Little
262. Surveys, Tests, and Measurements.-Study of the methods of getting the facts in religious education. Consideration of underlying principles, techniques, and available materials. Special attention to procedure in a local church. 3 s.h.

Professor
265. Curriculum of Religious Education.-Study of various theories of the curriculum of religious education; conception of the curriculum as enriched and controlled experience. Analysis of existing curricula and critical evaluation of same. 3 s.h. Professor Spence
[Not offered in 1930-31]
266. Religious Drama.-Study and analysis of the best religious drama available. Project work in the writing and production of religious drama and pageants. 3 s.h.

Professor Spence
[Not offered in 1930-31]
267. Religious Education in the Community.-This course considers the larger relations of religious education to public education and other community agencies, and also the need, organization, program, and types of week-day religious education and the vacation church school. 3 s.h.

Professor Spence
268. Materials of Character Education.-A study of the Bible and other great religious literature for their contributions to character formation at each given stage of character development. Special emphasis on story material and modern religious poetry. 3 s.h.

Professor Spence
269. Principles and Program of Character Education.-Theory and methods of character education. Study of experiments made in this field. While primary consideration is given character building in religious education, the development of character education in the public schools will also be carefully surveyed. 3 s.h.

Mr. Litile
270. Religious Education in the Home-Deals with special problems in connection with making the home an effective religious educational agency. Study of family relationships, worship habits, attitudes, and ideals. Coöperation of the home with other agencies in the moral and religious development of the child. 3 s.h.

Professor
271. Research in Religious Education.-For advanced students and especially those majoring in religious education. Offers direction in the use of various techniques and methods for both field and library investigations. (All professors in the department are available for special counsel.) 3 s.h.

Professor
272. Philosophy of Religious Education.-For advanced students interested in problems growing out of the philosophical implications of religious education. Critical examination of various theories and principles underlying modern procedure in religious education. Prerequisite, course 261. 3 s.h.

Professor
273. Curriculum Construction.-This course deals with the processes of research, construction, and experimentation used in curriculum making. Actual curriculum construction will be undertaken. 3 s.h.

Professor Spence
[Not offered in 1930-31]
275. Introduction to the Psychology of Religion.-Study of the major factors of religious experience, together with conditions bearing upon its genesis and growth. 3 s.h.

Professor Hickman
276. Advanced Psychology of Religion.-Psychological study of such problems as worship, prayer, and various types of belief. Some attention to special problems. Prerequisite, course 275 or its equivalent. 3 s.h.

Professor Hickman
281. The Nature and Early Development of Religion.-Introduction to the early history of religion, the beliefs and practices of the more primitive peoples, and the religious life of the ancient world. 3 s.h.

Professor Cannon
282. Liviag Religions oi the World.-A survey of the religious systems of India, China, and Japan, followed by a study of Judaism, Mohammedanism, and Christianity, the object being to trace the historical developinent of each religion. 3 s .h.

Professor Cannon
283. Expansion of Christianity.-Apostolic missions, conquest of the Roman Empire, winning of northern Europe, the modern missionary era, status of missionary work in important areas, social aspects of missions, missionary biography. 3 s.h.

Professor Cannon
284. Principles of Missions.-The great missionary agencies, their foundation and growth; creation and cultivation of the missionary spirit at the home base; training and work of the pastor; principles and practice of missionary education; organization of the local congregation for its missionary tasks. 3 s.h.

Professor Cannon

## DEPARTMENT OF ROMANCE LANGUAGES

PROFESSORS WEBB, COWPER, AND JORDAN, ASSISTANT PROFESSORS YOUNG AND
WALTON, MR. STEINHAUSER AND MR. BRIDGERS, MISS
BREIVER, AND MISS SEAY
The elementary and introductory courses in French are for the general student and seek to impart a reading knowledge of standard French. Courses 107, 217-218 offer systematic training in the French language. They prepare for university courses where French is used in class, for
foreign study, and for teaching French. The literary courses are devoted to the systematic study of classical and modern French literature. Advanced students are offered an introductory course in Old French philology and literature.

The first two courses in Spanish are for the general student. They are designed to give a reading knowledge and a sound beginning in the use of the language. The remaining courses afford the opportunity to continue the study of the Spanish language and of Spanish and SpanishAmerican literature through four years.

An intensive course in Italian is offered to well-qualified language students.

Owing to the large number of applicants for enrollment in the French and Spanish courses, it is necessary to limit the number admitted. Students are admitted into each section or class in the order of application until the established maximum is reached.

Odd-numbered courses are offered in the first semester, even-numbered courses in the second semester.

## FRENCH

FOR ALL STUDENTS

1. Elementary French.-Pronunciation, grammar to include regular verb forms and common irregular verbs, translation. 3 s.h.

Professors Webb and Jordan, Assistant Professors Young, Walton, and Mr. Bridgers
2. Elementary French.-Completion of the irregular verb, composition, dictation, and translation of simple French. 3 s.h.

Professors Webb and Jordan, Assistant Professors Young and Walton, and Mr. Bridgers
3. French Prose.-Grammar review, dictation, composition, reading and translation of selected works of modern French authors. 3 s.h.

Professors Webb and Cowper, Assistant Professors Young and Walton, Mr. Bridgers, and Miss Brever
4. French Prose.-Dictation, composition, reading and translation of selected works of modern French authors. 3 s.h.

Professors Webb and Cowper, Assistant Professors Young and Walton, Mr. Bridgers, and Miss Brewer
5. Introductory Survey of French Literature from 1636.-Selected works of Corneille, Racine, Molière, Voltaire. Outline history, outside readings, and reports. 3 s.h. Professors Cowper and Jordan, Assistant Professors Young and Walton
6. Introductory Survey of French Literature from 1750.-Selected works of Rousseau, Chateaubriand, Hugo, Balzac. Outline history, outside reading, and reports. 3 s.h. Professors Cowper and Jordan, Assistant Professors Young and Walton

FOR JUNIORS AND SENIORS
107. French Composition.-Review of grammar. Oral and written composition. 3 s.h.

Professor Cowper
108. The French Romantic Movement.-3 s.h.
109. Moliére.- 3 s.h.

Professor Cowper
Professor Webb
[Not offered in 1930-31]
110. Poems of Victor Hugo.-3 s.h.

Professor Webb
[Not offered in 1930-31]
111. French Drama Since 1850.-Realism in French drama, the social comedy, the problem play. 3 s.h. Assistant Professor Young
112. French Drama Since 1850.-The Théâtre Libre, the psychological drama, survival and renewal of Romanticism, the symbolistic drama, the contemporary stage. 3 s.h. Assistant Professor Young

113-114. The Seventeenth and Eighteenth Centuries.-The rise and decline of French classicism from Malherbe to the Encyclopédistes and Beaumarchais. Lectures and reading. 6 s.h.

Assistant Professor Walton
25-26. Exercises in Spoken French.-Two hours a week throughout the year. 2 s.h.

Miss Seay
FOR SENIORS AND GRADUATES
215-216. The Modern French Novel.—A survey from Madame de Lafayette to Paul Bourget with particular reference to the effect of literary movements upon the evolution of novel technique. 6 s.h.

Professor Jordan
217-218. The French Language.-French phonetics, composition, dictation, conversation, lectures in French. 6 s.h.

Professor Webb
219. Old French.-An introduction to the Old French language and literature. Brief study of Old French grammar ; the Chanson de Roland; lectures. 3 s.h. Professor Cowper
220. Old French.-Types of Old French literature. Reading of typical Romans d'aventure, lectures. 3 s.h. Professor Cowper
221. Rousseau and the Beginnings of Romanticism.-3 s.h.

Professor Cowper
[Not offered when Old French is given]
ITALIAN
FOR JUNIORS AND SENIORS
181-182. Italian.-Wilkins, First Italian Book; Italian Folk Tales; Dante, Vita Nuova; Dante, Divina Commedia. 6 s.h.

## SPANISH

FOR ALL STUDENTS
61. Elementary Spanish.-Grammar of the principal parts of speech in their simple applications, regular verbs, and the most common irregular verbs. Reading of simple prose. 3 s.h.

Mr. Steinhauser and Mr. Bridgers

62. Elementary Spanish.-Continuation of course 61, including radical changing and the most common irregular verbs in all the tenses of the indicative and subjunctive. Reading of simple prose. 3 s.h.

Mr. Steinhauser and Mr. Bridgers
63. Spanish Prose.-Thorough review of grammar, emphasizing the uses of the subjunctive, common idiomatic phrases, and other peculiarities of syntax. Reading of representative texts of modern Spanish. 3 s.h.

Mr. Steinhauser
64. Spanish Prose.-Continuation of course 63. Reading of representative texts of modern Spanish. 3 s.h. Mr. Sternhauser
65. Spanish Literature.-General survey of Spanish literature from the earliest beginnings to the present day, with special emphasis on the fiction and drama of the Golden Age. 3 s.h. Mr. Steinhauser
[Not offered in 1930-31]
66. Spanish-American Literature.-Survey of Spanish-American literature, with special emphasis on the practical aspects of Spanish-American life. Advanced composition. 3 s.h. Mr. Steinhauser
[Not offered in 1930-31]
67. Spanish Novel.-History of the origins and early types through the classic period. 3 s.h.

Mr. Steinhauser
68. Modern Spanish Novel.-The Spanish novel from the beginning of the nineteenth century until the present. 3 s.h. Mr. Steinhauser

69-70. Spanish Conversation and Composition.-Exercises on assigned topics and material. Two hours a weck throughout the year. 1 s.h. each semester. Mr. Steinhauser
Open on consent of the instructor, to students who are taking or who have taken a course above Spanish 61 and 62.

## DEPARTMENT OF SOCIOLOGY

PROFESSOR ELLWOOD
No course in Sociology is open to freshmen or sophomores.
Odd-numbered courses are offered in the first semester, even-numbered courses in the second semester.

101-102. General Sociology.-An introduction to the scientific study of social life, its origin, evolution, and organization, as illustrated by a number of concrete social problems. 6 s.h. Professor Ellwood
205. Social Pathology.-Prerequisite, courses 101-102 or their equivalent. A study of the causes, extent, significance, and constructive treatment of the principal forms of pathology in modern society: Poverty, physical defectiveness, malnutrition, feeble-mindedness, insanity, undirected leisure activities, and unstandardized commercial recreation, alcoholism, prostitution, vagrancy, and delinquency. 3 s.h.

Professor Ellwood
206. Criminology.-Prerequisite, courses 101-102 or their equivalent. A study of the original tendencies of man and the problem of socializing these tendencies; the relation of physical and mental defectiveness and untoward influences in the home and neighborhood to crime; the development of criminological theory and procedure, emphasizing penal and reform methods, and especially modern methods of social treatment and prevention of crime. 3 s.h.

Professor Ellwood

# DEPARTMENT OF PHYSICAL EDUCATION 

## PHYSICAL EDUCATION FOR MEN

DIRECTOR OF PHYSICAL EDUCATION DEHART, ASSISTANT DIRECTORS OF PHYSICAL EDUCATION BUCHHEIT, TILSON, CAMERON, COOMBS, AND BAKER, GYMNASIUM DIRECTOR CARD

Two hours a week of physical exercise and one hour of classroom work are required of all students through the sophomore year. Although not included in the 126 hours needed for graduation, the above requirements must be met satisfactorily before the end of the senior year. The work is under the immediate direction of the various coaches of the varsity teams. The aim to promote mass athletics is furthered by placing various supervised sports on a competitive basis.

A careful physical examination of all students is made and recorded and special training to correct physical deficiencies and weaknesses is given.

All students not excused from the regular course because of physical disabilities are required to take part in football, basketball, baseball, track, and swimming through their first year. The classroom work consists of lectures on the rules, methods of training, fundamentals of the sports, etc.

During the sophomore year a student may elect the sport in which he will major and his exercise will consist of work in that sport under the direct supervision of the Director of Physical Education or the Assistant Director who may be in charge of the sport elected as a major. The lectures will cover the methods of coaching the sport elected as a major and physical hygiene.

Calisthenics are used as little as possible and the entire course of work is planned to introduce games and the spirit of competition into the mass form of athletics.

The courses in physical education are designed to meet the increased demand for teachers of physical education and athletic coaching in the public schools.

A regulation costume of white shirt, white trousers, and gymnasium shoes is required.

## PHYSICAL EDUCATION FOR WOMEN

Miss Grout, Director
Miss Morze, Assistant
Two periods of exercise a week are required of all women students through the junior year. In addition, one lecture hour of personal hygiene is required of all freshmen. Although not included in the 126 hours needed for graduation, the above requirements must be met satisfactorily before the end of the senior year.

All students are given a physical and medical examination upon entering and at intervals throughout their college course. Classes in individual gymnastics and moderate sports are arranged for those who should not take the more active work.

## ACTIVITIES OFFERED:

Fall term (October to December): Hockey, swimming, tennis, riding, moderate sports, hiking.

Winter term (December to March): Informal gymnastics, Danish gymnastics, apparatus, games, individual gymnastics, folk dancing, clogging, interpretative dancing, swimming, basketball.

Spring term (March to June): Tennis, swimming, riding, baseball, track, and field events, archery.
102. The Teaching of Physical Education.-This course is intended to meet the needs of prospective teachers in the public schools who may wish to assist in physical education. It includes first, a review of personal and school health problems with emphasis on the teaching of hygiene in the public schools; second, discussions and lectures on such topics as the value of play, the psychological and physiological make-up of the school child, objectives, the planning of programs of physical education for different age groups; third, one meeting a week for practice in playing, refereeing, and coaching various games and sports. Three lecture hours and one practice period a week. 3 s.h. Miss Grout

Open to senior women in the Department of Education and to other Seniors and Juniors by permission of the instructor.

## GENERAL REGULATIONS

The academic year is divided into two semesters. The first semester begins September 24; the second, February 2. Commencement is held on Tuesday and Wednesday after the first Sunday in June.

## TIME OF ENTRANCE

Patrons of the University and students who intend to enter the freshman class are reminded that the entrance examinations are held at the opening of the first semester in September and that this is the proper time to enter. If an applicant for admission cannot come early in the year, he should wait, except in very unusual cases, until the opening of the next semester. It is important that all students be present on the first day of the session, and those who are late incur the penalties described above in this catalogue under the topic "Admission to College" and below under the sub-topic "Course-Cards." Students who enter after the beginning of the semester are marked absent in the work they have missed in the courses to which they are admitted, and these absences are counted as other absences from class.

## MATRICULATION, REGISTRATION, AND ENROLLMENT

All students must appear before the Committee on Admission and obtain cards for admission or examination. Cards of admission must be presented at the treasurer's office at the time of matriculation. All students, both old and new, are required to matriculate at the beginning of each semester and to obtain from the treasurer a certificate of matriculation which serves also as an enrollment card. Students matriculating in either semester at a date later than that prescribed in this catalogue shall pay to the treasurer a penalty of five dollars for late registration. Students whose course-cards have been approved in the spring in the manner provided below are given an opportunity during the summer to matriculate by mail for the first semester in the fall. No student is admitted to any class without a matriculation card.

## RELIGIOUS EXERCISES

Chapel exercises are conducted every week day except Saturday throughout the academic year at ten-thirty A.M., and all students are required to attend these services. During the Saturday chapel period all students meet by classes to confer with their respective faculty class advisers. Vesper services are held each Sunday afternoon at $4: 30$ o'clock.

## NUMBER OF HOURS OF RECITATION WORK

No undergraduate student is allowed to take less than fifteen hours of recitation work a week without special permission of the Faculty.

## COURSE-CARDS

Members of the freshman, sophomore, and junior classes are required to submit to the Council on Instruction at a time appointed by the Council not later than May 1 cards showing their selection of courses for the following year. These cards must be approved by the Council. After having been approved, the cards must be filed with the Dean of the College for permanent record. Students in the freshman, sophomore, and junior classes who do not select their courses for the following year at the time appointed by the Council on Instruction have to pay a fee of five dollars to the treasurer of the University before their course-cards may be approved in the fall. Students whose course-cards have been approved but who, for reasons not arising within the University, desire to make a change in the card approved have to pay to the treasurer a fee of one dollar for each change made. Elective courses beyond the number required for a degree may be marked "extra." No course may be dropped without permission of the Faculty.

## CLASS-STANDING

A student may not rank as a Senior if he has work back of the junior year or more than one study in the junior class; and a student may not rank as a Junior if he has work back of the sophomore year or more than one study in the sophomore class. No student who has any work on which he has previously failed is allowed to enter the senior class as a candidate for graduation.

## EXAMINATIONS

Mid-year and final examinations, are held in all subjects in January and May respectively; mid-semester examinations for Freshmen and Sophomores are held in November and March. The examination records, combined with the records made in class-recitations, constitute the student's final grades.

## REGULATIONS REGARDING MARKS AND CONDITIONS

The following regulations have been adopted by the Faculty:

1. Marks shall be reported so as to indicate one of five things:
(a) Passed Without Condition.-A mark of 70 or over shall indicate that a student has passed a course without condition. Students shall be graded according to the following system: Those who are adjudged exceptional ( 95 and above), superior ( 85 to 94 inclusive), medium ( 76 to 84 inclusive), inferior ( 70 to 75 inclusive). Normally the number of students adjudged exceptional should not exceed three per cent., and the number adjudged superior should not exceed twenty per cent.
(b) Conditioned.-A mark of at least 65 and less than 70 shall indicate that a student is conditioned.
(c) Incomplete.-A mark of incomplete may be reported by the instructor if for any reason he is unable to report the final grade at the regular time.
(d) Failed.-A mark of less than 65 shall indicate that the student has failed entirely in the course and that in order to receive credit for it he shall be obliged to take it again in class.
(e) Absent from Final Examination.-The mark "a" shall indicate that the student was absent from a final examination.
2. A student absent from examination and marked "a," if his absence has been excused by the Dean of the College, may receive an examination on the payment of a fee of five dollars to the treasurer of the University, unless the Dean recommends that the fee be remitted. The Committee on Schedule shall arrange for the examination in cases where absences are incurred and excused, and the grade reported in these cases shall be that earned by the student.
3. Students who are conditioned with a mark of at least 65 and less than 70 may remove the condition by complying with any requirements that satisfy the department concerned by March 15 following, if the condition was incurred in the first semester, or by Monday of the week following the opening of the University, if the condition was incurred in the second semester. All students with conditions or "incomplete" grades who have not satisfied the requirements of the departments concerned and obtained a passing grade by these dates are regarded as having failed on the course concerned and must repeat it in class in order to receive credit for it. When a condition is removed, the instructor shall report a grade of 70 ; in the case of a student whose grade was "incomplete," the instructor reports whatever grade the student earns.
4. Not more than six semester courses on each of which an average grade of 70 has been made are allowed to count as credit towards the bachelor of arts degree unless the student has made an average grade of 80 or more on all his work. A student thus deficient will not be allowed to carry in his fourth year more than a normal amount of work.

Excuses for absences from examination are handled in the same way as excuses for absences from class.

## CONDUCT OF STUDENTS

The University expects of its students loyal and hearty cooperation in developing and maintaining high standards of conduct as well as of scholarship. The University therefore reserves the right, and matriculation by the student is a concession of this right, to ask the withdrawal of any student whose conduct at any time is not satisfactory to the University, even though no specific charge be made against the student.

## EXCLUSION FOR FAILURES

A student is not permitted to remain in the University in the second semester unless he passes without condition as much as six semester-hours of work in the first semester; he is not permitted to re-enter in September nor to enter the Summer School, if he did not pass without condition at least eighteen semester-hours of work in the previous year.

## DEFICIENCIES IN COMPOSITION

The following regulations have been adopted by the Faculty:

1. Any Freshman who is found by the Department of English to be unable to handle satisfactorily the work of composition in English 1-2 is required to take special work until he is able to do satisfactorily the regular work of English 1-2.
2. No student who has failed in English 1-2 or 3-4 is permitted to become a special student without continuing his work in composition until he has made up his deficiency in this work.
3. Whenever the work of a student in any subject is satisfactory to an instructor except for gross errors in English, the instructor concerned may hand in a provisional grade only, said grade not to count until the student shall have improved his work in composition to the satisfaction of the English Department; a list of such provisional grades, along with evidence of deficiencies, shall be furnished the English Department each term by the officers in charge of the grades, and a report shall be made by this department when the deficiencies shall have been removed.
4. All instructors are requested to warn their students each semester concerning these regulations.

## CANDIDATES FOR ACADEMIC DEGREES

1. A tentative list of all candidates for the bachelor's degree who have no uncleared conditions charged against them and a tentative provisional list of all candidates for the degree with unsatisfied conditions named shall be prepared under the supervision of the Dean of the College as early in the college year as possible, be read by him to the Faculty at its first regular meeting in October, be furnished in copy to each department of instruction for information and reference, and also posted in copy on the official bulletin board of the University for the information of the students concerned.
2. Copies of a second such tentative list shall be likewise prepared, read, and distributed by April 15.
3. A final list of all candidates for the degree shall be read by the Dean to the Faculty at its first regular meeting in May and adopted by the Faculty as the final list. After the adoption of this list no name may be added to it.
4. Similar lists of all candidates for the master's degree, with courses counting for credit named, slall be prepared, read to the Faculty, and furnished to all departments concerned by the Dean of the Graduate School on the dates named above.
5. Students who complete during a Summer School the requirements for a degree shall be classified for graduation as of the year following the Summer School in which the work was completed, and their names shall so appear in the catalogue of the University and on the commencement program.

## ABSENCES FROM CLASS

Regular and punctual attendance on class-work is required of all students. Absences must be explained to the Dean of the College. Any student absenting himself without acceptable excuse from his class-work may be disciplined by the Dean at his discretion.

Daily reports of all absences of students from class are made by each instructor and filed in the office of the Dean. A permanent record is kept of the attendance of each student and becomes a part of his general college record.

All absences, whether excused or unexcused, shall be made up to the satisfaction of the department concerned. In case a student has been absent from fifteen per cent. of the exercises scheduled to be held in a course, whether the absences are excused or unexcused, he shall be debarred automatically from the final examination in that subject. Eight absences debar a
student from examination in a course meeting three hours a week, ten absences in a course meeting four hours a week. A student incurring three unexcused absences in a three-hour course or four in a four-hour course shall be debarred from final examination in the same manner. In such a case he can not secure permission to stand the final examination except by written approval of the instructor concerned and of the Dean of the College on blanks provided for that purpose. A student thus debarred from examination must repeat the course in class in order to obtain credit for it. A student is counted absent from meetings of a class held before he matriculates at the beginning of a semester. These absences are handled in the same way as are other absences.

Each absence incurred just before or after the Thanksgiving, Christmas, or Easter holidays shall be counted as two absences, excused or unexcused as the case may be.

## SCHOLARSHIP REGULATIONS FOR ATHLETIC AND OTHER ORGANIZATIONS

The following regulations have been adopted by the Faculty:

1. Any student who receives less than a passing grade on more than six hours of his required work of the preceding term shall be ineligible to represent the University in any athletic contest, concert, or other public event.
2. Students who are candidates for participation in such contests or events or who are members of organizations engaging in them are required also to be doing satisfactorily the work of the current term. In order to enforce this requirement the following regulations have been adopted:
(a) No team or organization shall represent the University in a public event until a list of its members has been submitted to the Faculty for approval.
(b) It shall be the duty of the student manager of every team or organization to furnish to the secretary of the Faculty for the use of the Faculty at least four weeks before the first public appearance of the team or organization is scheduled to take place, a written list of all candidates for places on such team or organization.
(c) The names of the candidates for places on any team or organization shall be read to the Faculty at its first regular meeting after the list has been furnished to the secretary, and they shall be recorded in the minutes of the Faculty for that meeting.
(d) If at the time this list is presented to the Faculty or at the next regular meeting of the Faculty thereafter any member of the Faculty shall report that a student who is a candidate for a place on a team or
organization is failing in his work, it shall be the duty of the secretary to give the student written notice of this report, specifying the course or courses in which the student is reported as failing. If a student is reported by two or more instructors as failing, he shall be notified that he will not be eligible to represent the University on any team or organization as long as more than one instructor reports him as failing in his academic work.
(e) In case a student manager shall not furnish the secretary of the Faculty with the list of candidates required at the time specified in section (b), the Faculty shall follow the procedure prescribed in sections (c) and (d) when such a list is furnished, and the secretary shall notify any student who is reported by two or more instructors as failing in his work that he will not be eligible to represent the University on any team or organization as long as more than one instructor reports him as failing.
(f) If at any time after this preliminary report is made, a student who was then eligible to represent the College on a team or organization shall be reported by two or more instructors at the same meeting of the Faculty as failing in his work, the secretary shall notify him, specifying in the notice the course in which he is reported as failing, that if he has not removed his deficiency at the end of two weeks, he will be debarred from the team or organization and will not again be eligible to represent the University on a team or organization until he has improved his work so that not more than one instructor reports him as failing.

## REGULATIONS GOVERNING ATHLETIC ELIGIBILITY

Duke University is a member of the Southern Intercollegiate Athletic Conference. The athletic eligibility regulations of the University comply with the rules governing members of that Conference.

## ABSENCES FROM THE CITY

No student is allowed to leave the city without the permission of the Dean.

## ADMINSTRATION OF DISCIPLINE

General oversight of the conduct of students and the administering of discipline are vested in the Dean of the College. The duty of immediate supervision, guidance, and control of the women students is entrusted to the Dean of the Woman's College. However, through the expressed willingness of the students to assume the responsibility of maintaining high standards of morals and honor at all times at the University, the student body has properly become in a great degree self-governing in this respect. Two councils, one of men and the other of
women, each composed of carefully chosen and duly elected representatives of the student body, exercise the authority granted the students to investigate all cases of misconduct, as well as all other cases of violation of proper student standards and traditions, and to make recommendations of penalties based on their findings. Occasions seldom occur where such recommendations cannot be accepted and enforced.

The student councils have been of great help to the administrative authorities of the University. They do not merely exercise police authority for restraining and punishing evildoers but also exert a guiding and stimulating influence for the promotion of high ideals of conduct and student relationships.

## REGULATIONS REGARDING PUBLIC LECTURES AND OTHER PUBLIC OCCASIONS

All public lectures or addresses and other public events that are given under the auspices of the University or of any organization in any way connected with the University are under the supervision of the Faculty Committee on Public Lectures. All dates and programs must be approved by this committee except in cases where such public occasions have been placed under the supervision of a special committee. To prevent conflicts and to facilitate the work of scheduling the activities of the University, the following regulations have been approved by the Faculty:
(1) The Committee on Public Lectures shall provide each year an official calendar.
(2) No meeting, entertainment, religious service, or athletic contest shall be announced publicly or be entitled to a date at any hour in the day or night unless the occasion has been officially entered in the calendar except in the case of organizations like the Y. M. C. A., the Y. W. C. A., and the literary societies, which have meetings at stated times.
(3) The faculty representative of any organization connected with the University or any member of the Committee on Public Lectures may schedule a public occasion for any date not already taken provided he writes on the calendar under the date he desires the name of the occasion, the hour, and the place of meeting and signs his name under the entry; however, the Committee on Public Lectures shall approve all public events so scheduled and the chairman of this committee shall make known the Committee's approval by signing his name to the calen-dar-entry under the name of the faculty representative proposing the event before any such public event proposed becomes official, the Committee's approval by signing his name to the calendar shall have exclusive right to the date unless consent of the organization affected is obtained
for a change of date or unless the Faculty shall vote to change the date or revoke the right.
(5) The Y. M. C. A. and Y. W. C. A. shall have every Wednesday night, the literary societies shall have every Tuesday night, and other organizations recognized by the Faculty, shall have Monday nights of each month for their meetings and no organization or individuals have a right to take any one of these nights for any public meeting or contest unless the consent of those entitled to the date be obtained or unless the Faculty vote to make a temporary change in the schedule.
(6) These organizations with dates regularly provided have not the right to schedule public meetings for any nights other than these herein mentioned unless no other public meeting is at any time set for the dates they wish, and no one of these organizations with dates already provided has precedence over any other in selecting irregular dates for meeting.
(7) The faculty representative scheduling any public event shall be responsible for getting due notice to the appropriate University office concerning the place and time of the event so that needed arrangements may be made for it.

## REPORTS

Reports of the class attendance records and of the proficiency in studies of each student are sent to his parents or guardians after the examinations at the end of each semester. For Freshmen and Sophomores, mid-semester reports are made.

## MEDICAL CARE

The University Physician, Dr. Joseph A. Speed, who maintains offices on the University campus, has general charge of the health of the students. Ample, first-class provision is made in the hospital of the Medical School of the University for caring for all sick students. Any student too ill to attend his college classes is taken to the hospital.

## FEES AND EXPENSES

The following tables show the general fees and charges collected from all students and the special fees collected from those taking courses in the sciences. All fees for each semester are due and payable, unless otherwise specified, at the time of registration at the beginning of that semester, and no student is admitted to classes until his fees have been paid.

## GENERAL FEES

Matriculation, per semester.................................................................................00

$\ddagger$ Room rent, per semester (two in room)........................................ 62.50
Athletic fee, admitting students to all athletic contests held on the
University grounds, per semester...............................................
$\dagger$ Damage fee, payable annually at the time of first registration........ 1.00
Medical fee, payable annually at beginning of the second semester 2.00
Library fee, per semester............................................................... 5.00

Publication fee:
First semester.
2.50

Second semester.......................................................................... 3.00
Diploma fee, payable by candidates for degrees at the beginning of
the second semester; refunded if the diploma is not a warded..... 5.00
For further information concerning room rent see below.

## LABORATORY FEES

Botany 1 and 2.......................................................................................50
Botany 51 and 151 ................................................................................. 5.00
Botany 52, 101, 102, 111, 112, and 52................................................... 2.00
Botany 201................................................................................. 4.00
Chemistry 1, 2, 21, 30, 41, 261, 262, 215, 216, 231, 232, 240, and 260... 6.00
Chemistry 151, 152, 241, 244, 253, 254, and 256................................ 7.50

Electrical Engineering 151, 152, 153, 154, 155, 161, and 162 ............... 2.00
Physics, all courses........................................................................ 2.00
Zoölogy, all courses (except 1 and 2)............................................... 3.00


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## TEACHERS TAKING COLLEGE COURSES

Teachers in near-by schools taking one or more courses are required to pay a registration fee of $\$ 5.00$ and a tuition fee of $\$ 2.00$ per semester-hour of credit in addition to any regular laboratory or other fees collected from regular students taking the courses.

## ROOMS AND CONDITIONS OF RENTING THEM

The itemized statement in the general table of expenses includes the care of rooms, in which everything essential in the way of furniture is provided. All rooms are supplied with heat, water, and electric light. Each student furnishes his own blankets, sheets, pillow-slips, towels, and pillows.

Rooms are reserved only for students who have been officially accepted by the University. They are rented for no shorter period than one semester. A room deposit of $\$ 5.00$ is required of each applicant for admission. This fee is deducted from the room charges at the time of registration for the fall semester. The reservation fee will be refunded to any applicant not accepted by the University provided the official receipt for the fee, given to all paying it, is presented either in person or by letter to the treasurer's office, but students who make application and are accepted will not be entitled to have the reservation fee refunded unless the requst is made by or before August 1.

An old student who wishes to retain his room for the succeeding year must notify the treasurer's office on or before May 15. All rooms which have not been signed for on or before May 15 will be considered vacant for the succeeding year. Unless a deposit of $\$ 5.00$ for each proposed occupant, in part payment of rent, is made by August 1 reservations are cancelled and the University is free to rent the room to other students. When a room is once engaged by a student, no change will be permitted except with the consent of the treasurer. Leaving one room and occupying another without permission is strictly against the rule and will render the offender liable to charge for both rooms for the entire semester. No occupant is permitted to rent or sublet a room to another occupant. The use of a room for merchandising of any kind is strictly forbidden.

The University does not assume the responsibility of selecting and assigning room-mates, though it will gladly render any assistance possible in the matter.

## REGULATIONS REGARDING ROOMS

A fine of $\$ 2.00$, payable to the treasurer of the University, shall be charged to any student who has moved furniture from one room to another without permission from the University authorities.

A fine of $\$ 2.00$, payable to the treasurer of the University, shall be charged to the occupants of any room in which the permanent lighting fixtures have in any way been altered or changed. A like fine shall be imposed upon the occupants of any room with lights having a total capacity of more than 100 watts.

A fine of $\$ 5.00$, payable to the treasurer of the University, shall be charged to any student moving from one room to another upon the campus without permission from the University authorities.

## DORMITORIES

On the west campus there are three groups of dormitories, each group forming a quadrangle enclosing a court. For the present these groups of dormitories are designated as $\mathrm{A}, \mathrm{B}$, and C. They contain ample rooming quarters for all the men students.

## BOARDING ACCOMMODATIONS

Beginning with the academic year 1930-31 the University will open its dining hall in the Union on the west campus with accommodations sufficient to provide in a superior way for all resident men students. It is the policy of the University to furnish board to its students at actual cost. Charges for board will not exceed $\$ 25.00$ per month.

The Union is the logical center of student activities for men and it will be found desirable for male students to board in its supervised halls. In the Union are located the University Post Office, the University Store, the University Barber Shop, and all publication staff offices.

In addition to the Union dining halls a Coffee Shop will be operated for the convenience of students and visitors.

## PUBLICATION COUNCIL

The Publication Council was authorized by the Trustees at the mid-year meeting in 1926-27. This council has control of the undergraduate publications. It is to be composed of members of the faculty appointed by the President, two alumni elected by the Alumni Council, representatives of the student body and the different publications. A publication fee of $\$ 5.50$ was authorized by the Trustees to be collected from each undergraduate, $\$ 2.50$ payable at the beginning of the fall semester and $\$ 3.00$ at the beginning of the spring semester.

## LAWS REGULATING PAYMENTS

The Executive Committee of the Trustees of Duke University has enacted the following regulations, which govern the payment of all fees due the University:

1. The president and the treasurer of the University have no authority to suspend, or in any way alter these regulations.
2. Matriculation and tuition fees are never refunded.
3. Any student who has failed to pay his bills on the dates advertised in the catalogue is denied the right to attend classes until his account is settled in full.
4. No student is considered by the faculty as an applicant for graduation until he has settled with the treasurer for all of his indebtedness to the University.
5. No student is allowed to stand the mid-year or final examinations of the academic year who has not settled all his bills with the treasurer of the University.

When a student wishes his bills sent to his parent or guardian, the student or his parent or guardian must so notify the treasurer of the University in writing in due time, but this in no way releases the student from liability to established penalties if his bills are not paid on the dates advertised.

## TRANSCRIPTS

Students desiring to transfer from Duke University to another institution are entitled to one transcript of their record. A charge of one dollar is made for each additional copy.

## ESTIMATED EXPENSES FOR AN ACADEMIC YEAR

The necessary expenses of a student are moderate; the University dormitories provide thoroughly comfortable and wholesome living conditions at a minimum cost, while all charges made by the University have been kept low. Incidental expenses depend naturally upon the tastes and habits of the individual. The following table gives the necessary college expenses for one year.


Students who hold scholarships or other exemption from tuition will deduct one hundred and fifty dollars from the above totals.

# SCHOLARSHIPS AND OTHER SOURCES OF AID 

## UNDERGRADUATE SCHOLARSHIPS

Ten scholarships paying tuition are offered to undergraduates. Five are held by members of the sophomore class and five by members of the junior class. Sophomore scholarships are awarded at the end of the freshman year and junior scholarships at the end of the sophomore year. They are awarded on the basis of the applicant's character and promise as indicated by his work in college.

The University reserves the right to withdraw a scholarship at any time from a student who does not make worthy use of it.

## ANGIER B. DUKE MEMORIAL SCHOLARSHIPS

The Angier B. Duke Memorial, Incorporated, awards four scholarships with an annual value of $\$ 250$ each to undergraduate students in Duke University. These scholarships are awarded as follows: one on the basis of merit and necessity to an accredited high-school graduate entering the freshman class of Duke University ; and one each to a member of the sophomore, junior, and senior classes on the basis of merit, necessity, and worthy individual contributions to university life. The Angier B. Duke Memorial also administers through an advisory committee of the officers of the University a loan fund of $\$ 1,000,000$ for undergraduate students.

## LOAN FUNDS

In addition to the Angier B. Duke Memorial loan fund, the University administers other endowed loan funds for the benefit of students who are not financially able to meet their expenses. The loan funds are kept by the treasurer as separate and distinct funds from all other endowments and holdings of the University and are used for no other purpose than to aid worthy students of the University. These funds are administered in accordance with the following regulations:

1. No loan shall be made to a student who violates any of the regulations of the University or whose classwork is not satisfactory to the Faculty.
2. Loans will be made only to students who are taking full courses of study that lead to a degree, and all loans must be arranged for not later than one week after the beginning of a semester.
3. Every applicant for a loan must present with the application such security as the President of the University may approve, and no money shall be advanced before a note with approved security is in the hands of the treasurer of the University.
4. No loan shall be made to defray any other expenses than those incurred during the academic year for tuition, matriculation, and room-rent.
5. Interest at the rate of six per cent. annually shall be charged for all loans of money, and the interest must be paid annually.

## SPECIAL TUITION SCHOLARSHIPS

The J. A. Odell, J. M. Odell, George W. Watts, Herbert J. Bass, C. W. Toms, Arthur Ellis Flowers, Heath, Weatherby, Banks-Bradshaw, McMullan, Elisha Cole, E. M. Cole, John T. Ring, A. D. Betts, John W. Neal, Jr., Moore, Buchan, Parrish, and Mary Newby Toms scholarships are open to undergraduate students.

## SONS AND DAUGHTERS OF MINSTERS

The sons and daughters of ministers are exempt from paying tuition; they are required to pay all other college fees.

## CANDIDATES FOR THE MINISTRY

Candidates for the ministry who are not sons of preachers are required to give their notes for tuition. If they enter the regular ministry within three years after leaving college, these notes will be surrendered to them; otherwise the notes will be collected.

## HONORS AND PRIZES

## HONORS

All students in the freshman and sophomore classes who make an average of 90 or above are given honors.

Students who have shown exceptional attainments in a group of studies covered by the work of one of the departments of the University may become candidates for honors in that department at graduation.

Any department may at its discretion each year offer work the satisfactory completion of which will be one of the requirements for honors. This work shall be in addition to that required for graduation and may take the form either of additional work done in conjunction with the regular courses of the department, or of work independent of such courses. In quantity it shall be at least equivalent to that required for two semester-hours of credit in an advanced course.

The granting of department honors shall be dependent on the fulfilment of the following requirements:

1. In order to be eligible for honors in a department a student must, by the end of the senior year, have completed, with an average grade of at least 90, twenty-four (if department prefers, eighteen) semesterhours of work taken in that department after the freshman year. The student must obtain, on or before October 15 of the senior year, the approval of the head of the department of the courses that constitute the eighteen or twenty-four semester-hours required.
2. The student must enroll for the honors work of the department on or before October 15 of the senior year and must complete this work satisfactorily by the end of the senior year.
3. No student may enroll for the honors work of a department if he is carrying a schedule of regular courses in his senior year in excess of thirty-two semester-hours.
4. No student may enroll for the honors work in more than one department.
5. Those students who make an average grade of 95 in as many as twenty-four semester-hours (eighteen if the department prefers) in courses as above described and complete satisfactorily the honors work prescribed by the department are given highest honors.

The degree of bachelor of arts or bachelor of science with distinction is conferred under the following rules:

Students who have completed as much as three years of their college work in Duke University and who have attained an average grade of 90 are recommended for a degree magna cum laude; those who have attained an average grade of 95 are recommended for a degree summa cum laude.

## MEDALS AND PRIZES

The Wiley Gray Medal was established by the late Robert T. Gray, Esq., of Raleigh, North Carolina, to be awarded annually in memory of his brother. It is given for the graduating oration that shall be, in the opinion of a committee appointed on the day of Commencement, the best speech, with respect to both declamation and composition.

The Fortnightly Club offers annually cash prizes for the best literary productions by undergraduate students of the University.

The Debate Council has authorized the awarding of medals to members of the graduating class who have represented the University in at least two intercollegiate debates. The medals are given by the local chapter of the Tau Kappa Alpha fraternity.

The Southern History Prize is awarded each year for the best essay submitted dealing with a subject relating to Southern History. The prize is twenty-five dollars in cash donated by an anonymous friend of the University. The competition for the prize is conducted under regulations adopted by the Trinity College Historical Society.

The Robert E. Lee Prize is the gift of Reverend A. W. Plyler, of the class of 1892, and of Mrs. Plyler. The sum of one hundred dollars is awarded annually at Commencement, preferably to that member of the senior class who in character and conduct, in scholarship and athletic achievement, in manly virtues and the capacity for leadership has most nearly realized the standard of the ideal student. The Dean of the College, the Graduate Manager of Athletics, and the president of the Student Council constitute a committee to draft and adopt regulations governing the award.

The Robert Spencer Bell Prize is given by Mr. James A. Bell of the class of 1886 in memory of his son. The sum of one hundred dollars is awarded annually at Commencement on much the same general principles as is the Robert E. Lee Prize,
except that the Robert Spencer Bell Prize is limited to selfhelp students, and in making the award greater emphasis is placed on the work of the student in literary societies than on his athletic record.

The George F. Ivey Science Prize, established by Mr. George F. Ivey, is awarded each year for the encouragement of scholarship in physics, biology, and chemistry. The prize is fifty dollars in gold and was awarded the first year in physics, the second year in biology, and the third year in chemistry, and thereafter in this rotation unless otherwise determined by the donor.

The following rules have been adopted for the contest:
I. Any undergraduate student having already passed the first general course of eight semester-hours credit in the department concerned and having registered for an advanced course of not less than six semesterhours credit is eligible to compete for the prize.
II. By the end of the first week in May the department concerned will prepare a list of not more than twenty eligibles. The list must be approved by the Dean of the College and then be submitted to all students in courses above the first course in the department who will select by ballot the names of six candidates for the prize. The faculty of the department, acting as a committee, shall select the winner of the prize from among these six candidates.
III. The decision in every case is to be based upon such considerations as originality, industry, and initiative in executing work as well as upon grades.
IV. No student, having once won this prize, may again compete for it.

Dr. R. C. Parker gave to Duke University a silver cup of Chinese manufacture to be used for the encouragement of scholarship in Physics. The award is made annually by a committee from the Department of Physics acting with the President of the University to that student of Physics 1-2 who by the end of the academic year is judged to show the greatest promise as a student of Physics. The winner is chosen not only for his mathematical grades, but also for his industry, growth in power of reasoning, originality of point of view, and skill in experimentation. The name of the winner is engraved on the cup, of which he is given possession, subject to certain necessary regulations, until the next award is made.

The Iota Gamma Pi Science Fraternity offers an annual prize of twenty-five dollars to a member of the junior class
majoring in science who is judged to be the leading student in the scientific courses of the University. The fraternity submits to the judges a list of students eligible for the prize. The committee of award is composed of the Dean of Men, and one member each from the departments of Biology, Chemistry, Physics, and Engineering. The departments concerned choose their own representatives on this committee. The award is made on the following basis: quality of scientific work, 50 points; personality and general ability, 30 points; quality of work in departments other than scientific, 20 points.

The prize is publicly awarded by the president of the fraternity in Chapel during the second week of May.

## STUDENT ORGANIZATIONS AND ACTIVITIES

The Men's Association of Duke University comprises all men students in the University. It functions through its officers and a council to initiate policies and to oversee matters within the control of the student body. The council is composed of seven members: three from the senior class, two from the junior class, one from the sophomore class, and one from the Graduate School.

The Women's Student Government Association is similar in character to the Men's Association. Its council is composed of the officers of the Association and ex-officio of the Y. W. C. A. president and an undergraduate representative.

The Young Men's Christian Association and the Young Women's Christian Association are student branches of the national Christian Association. Each body aims to enrich not only the religious life of its members as individuals but also to promote group religious activity. Delegates are sent each year to summer conferences, state conventions, inter-state conventions and the state Bible and missionary institutes. Every year a series of special religious services is held. Bible and missionary study classes and Sunday School teacher-training courses are conducted under the auspices of the Association by members of the Department of Religion.

The Student Volunteer Band is an active branch of the Student Volunteer Movement of North America. This organization is composed of students who have volunteered for some form of foreign missionary service.

The Ministerial Association is a band of students who are preparing for the ministry.

The Symphony Orchestra, two smaller orchestras, and the Duke University Band afford a variety of opportunity for students interested in instrumental music. These clubs work under capable musical direction. Membership is based on competitive trials.

The Men's Glee Club and the Women's Glee Club are both active in concert work. When singing together they comprise the University Chorus. The Men's Glee Club plans to take a trip to Europe during the coming summer. The club takes two extended trips annually on one of which it is accompanied by the Symphony Orchestra and by one of the smaller orchestras. The Women's Glee Club includes a section of stringed instruments.

The Taurian Players is an organization for the promotion of dramatics at Duke University. Several plays are presented each year, the cast for each of which is determined on the basis of competitive try-outs. The Taurians welcome as associate members in their organization persons interested in the work they are doing.

The Southgate Dramatic Club proposes to foster dramatic interests among women students who are not Taurians. Private theatricals, usually consisting of one-act plays, are given to invited guests.

The Publication Council supervises all student publications of the University. It is composed of three members of the Faculty appointed by the President, four representatives of the student body two of whom are elected by the Men's Association and two by the Women's Association, together with the editors and business managers of the respective publications.

The Chronicle is a weekly newspaper of the University, entirely edited and managed by students. It carries items of local interest, as well as special feature articles and editorial comment.

The Archive is a monthly literary magazine edited and managed by the students. It contains essays, poems, short stories, and book reviews written by the undergraduates of the University together with some contributions from outside sources.

The Chanticleer is the year-book of the college. It portrays by word and picture the most important events of each school year.

A number of clubs exist on the campus, each of which fosters interest in some special subject or project.

The Trinity College Historical Society promotes interest in the study of history and the collection and preservation of historical documents, books, pamphlets, and the like.

The Classical Club meets to discuss literary, linguistic, historical, and archaeological aspects of the life and civilization of the ancient Greeks and Romans.

The Physics Club deals with interesting projects in physics which cannot be thoroughly discussed in the classroom.

The W. H. Pegram Chemistry Club performs a similar service in the field of chemistry.

The French Club draws together students particularly interested in the French language and literature.

The Polity Club promotes discussion of current problems in the field of international relations and American politics. It is affiliated with the International Relations Club.

The Braxton Craven Education Association consists of students who are interested in present-day educational problems.

The Biological Club gives its members opportunity to discuss important phases of biological work as well as training in the preparation and presentation of papers.

The Crowell Scientific Society is a union of all the departmental scientific societies of the University for the promotion of study and research within the University by coördinating the various departmental efforts.

The Cosmopolitan Club is open to all students from foreign countries and a few American students by invitation. The purpose of the club is to promote international understanding and good-will.

The Fortnightly Club, a chapter of the national literary fraternity of Sigma Upsilon, is composed of men of the junior and senior classes whose interests are literary. It encourages original work on the part of its members as well as the study of influential writers, ancient and modern.

The Debate Council, composed of three members of the Faculty, and two representatives of each of the literary societies, supervises and systematizes the work of debating both in the University and with other colleges.

The Columbian Literary Society, founded in 1846, and the Hesperian Society, organized in 1851, are the oldest undergraduate clubs on the Duke University campus. Their record is one of creditable achievement in public speaking which they encourage by an award of medals for excellence in that art. The two societies debate each other annually. The halls reserved in East Duke for these societies are modeled after the Chambers of Congress in the national capitol.

The League of Women Voters has a chapter at Duke University.

The Junior Big Sisters is an organization of Juniors for assisting Freshman girls in their adjustments to college life.

The Forum Club has as its object the promotion of interest in the classics among women students.

The Southgate Garden Club gives opportunity for expression to girls interested in gardening.

The Towen Girls' Organization brings together the day students among the women.

A number of honorary orders and fraternities carry on their work at Duke University. The general nature of these societies is indicated below.

Phi Beta Kappa, the oldest Greek letter fraternity in existence, was founded at William and Mary College in 1776. The Beta Chapter of North Carolina was organized at Trinity College on March 29, 1920. Membership is open only to those who have an average of 90 for six consecutive semesters of college work.

Tau Kappa Alpha (National Forensic Fraternity)
Sigma Upsilon (See Fortnightly Club, p. 124)
Kappa Delta Pi (National Education Fraternity)
Theta Alpha Phi (National Dramatic Fraternity)
Lambda Phi Gamma (National Music Fraternity)
Sigma Pi Sigma (National Physics Fraternity)
Phi Sigma (National Biological Fraternity)
Sigma Tau Delta (National English Fraternity)
Sigma Nu Phi (National Law Fraternity)
Alpha Kappa Psi (National Commercial Fraternity)

## Delta Upsilon Beta (Local Band Fraternity)

Iota Gamma Pi (Local Scientific Fraternity)
Psi Kappa Alpha (Local Economics Fraternity)
Chi Delta Phi (National Literary Sorority)
Delta Phi Rho Alpha (Local Sorority fostering college spirit, especially athletics)

Nu Sigma (Local Biological Sorority)
Red Friars, founded in 1913, is a secret society restricted to men of the senior class. Membership is limited to a small number who have manifested qualities of leadership by meritorious service as undergraduates.

Omicron Delta Kappa promotes qualities of leadership in publications, athletics, and other forms of campus activity.

White Duchy is a secret order comprising seven senior women recognized as representing the highest qualities of leadership in the various activities in which they have taken part.

The Tombs is a secret order of male students for the promotion of various campus activities, especially athletics. Membership is restricted to students of the junior and senior classes.

The 9019, a junior-senior scholarship society, was founded at Trinity College in 1890. The society started the South Atlantic Quarterly and has under its auspices the annual civic celebration on Washington's birthday and the annual declamation contest for high-school pupils.
$E K O-L$ is an organization of women students of the junior and senior classes to promote scholarship and the interests of the University.

Beta Omega Sigma, founded in 1917, is a local sophomore order.

The work of the social fraternities and inter-fraternity relationships at Duke University are governed by the Pan-Hellenic Council, which is composed of one representative of each national fraternity on the campus. The council has as its adviser a member of the Faculty chosen by the council. By order of the council, no student may be initiated into a fraternity until he has passed at least four courses in the semester preceding the earliest official time for the initiation of fresh-
men. The following social fraternities have chapters at Duke University:

Alpha Tau Omega
Kappa Sigma
Kappa Alpha
Pi Kappa Alpha
Sigma Phi Epsilon
Pi Kappa Phi
Sigma Chi
Delta Sigma Phi
Lambda Chi Alpha

Phi Delta Theta
Delta Tau Delta
Phi Sigma Delta
Pi Epsilon Pi (local)
Sigma Tau Alpha (local)
Psi Delta Sigma (local)
Sigma Delta (local)
Alpha Omega Sigma (local)

The Women's Pan-Hellenic Council, composed of three members from each sorority on the campus, governs sorority affairs. The sororities represented at Duke University are:

Alpha Delta Pi
Kappa Delta
Zeta Tau Alpha
Kappa Alpha Theta

Sigma Beta (local)
Delta Psi (local)
Mu Lambda (local)

## THE WOMAN'S COLLEGE OF DUKE UNIVERSITY

The Woman's College of Duke University is a College of Arts and Sciences within the University which provides for the instruction of undergraduate women as Trinity College provides for the instruction of undergraduate men.

In September, 1930, the present east campus, a hundred and twenty acres in extent, with a well-equipped plant including twelve new buildings, will be given to the women, thus offering the advantages of a separate college for women with its own distinct life and at the same time, through close association with the larger University life, preserving some of the best features of co-education. It is the aim of the College to make it possible for a woman to take all of her work, if she so wishes, on the women's campus. However, all courses in the University will be open to qualified women students and therefore they may enter courses given on the west campus which are not given on the east.*

The east or women's campus is situated about a mile and a quarter from the west campus. There is a private avenue connecting the two. For those members of the faculty and students who do not wish to walk, use bicycles, or other private methods of conveyance, buses will run at frequent intervals and at special rates.

The teachers of the College, many of whom teach also in Trinity College, are members of the University faculty and are to be selected in coöperation with the several departments of instruction just as in the case of teachers for Trinity College. thus assuring a uniform educational standard. Graduates of the Woman's College, as graduates of all other colleges and schools within the University, receive their degrees from Duke University.

Admission. Admission to the Woman's College, as to Trinity College, is on a selective basis, dependent upon the ability, attainments, and character of the applicant. The enrollment is limited and therefore an early application is desirable. All ap-

[^23]plications should be made to the Committee on Admissions. So far as possible, the Committee desires a personal interview with each applicant. This is of advantage not only to the Committee but to the applicant herself since it enables her to acquaint herself to some extent with the University and to discuss the possible courses of study.*

Courses of Instruction. The courses to be given on the east campus will be indicated on a chart to be inserted in this catalogue.

Residence Halls. Four new dormitories built especially for women and newly and attractively furnished will be opened in September, 1930. In each hall, serving as a center for the social life of the hall, are a large living-room, and three small reception rooms. The students' rooms are single, double, or arranged in suites of two rooms for two, three, or four students and are supplied with all necessary furnishings except towels, sheets, pillow-slips, blankets, and heavy bed coverings. All undergraduates from out of town are expected to live in the dormitories and no student under twenty-one is permitted to live outside of the dormitories unless with near relatives. Special arrangement may be made with the Dean by an older woman who wishes to live in town. Graduate students will be welcomed in the dormitories and special regulations will be made for their convenience. Heads of the halls, with the coopperation of the Student Council, have general charge of the social life of the halls. $\dagger$

The Union. Connected with the dormitories by arcades is the Union, which includes dining rooms for students and faculty, a lounge, and other rooms for various student activities.

The Library. The University has recently erected a beautiful library especially for the use of undergraduate women. Alï books for freshmen and sophomore work and many books for more advanced study and for general reading will be available, although for research and for certain advanced courses the students will use the University library on the west campus. An attractive feature of the library will be the Browsing Room, comfortably furnished, where students may find on open shelves the newest books in various fields.

[^24]Health. A physician's certificate of health and vaccination, blanks for which will be sent to every applicant, must be presented before admission. On entering the college and thereafter at stated intervals every student is given a careful examination by the resident physician and by members of the department of Physical Education.* The college has its own resident nurse and its students have full privileges in the use of the University Hospital. $\dagger$

Expenses. The tuition, matriculation, library, hospital, and other fees are the same in the Woman's College as in Trinity College. $\ddagger$ Other specified expenses are as follows :**

> Room rent Per Semester

Single rooms ................................................. $\$ 75.00$
2-room suite for 2 students ................................... 75.00
2-room suite for 3 students .................................... 62.50
2-room suite for 4 students............................. . 50.00
Double room, per semester ...................................... 50.00
Board ........................................................... 112.50
Practice pianos may be rented at a reasonable rate per semester. Other expenses will vary with the individual but should not be heavy. Resident students are not allowed to have automobiles with them at college.

There are a few positions open to women who wish to earn part of their expenses. These include service as waitresses in the dining-rooms, various kinds of work in the dormitories such as answering telephone calls, occasional work in the library, typing, or stenographic work.

[^25]
## BULLETIN

 OF Duke University
# DEPARTMENTS OF ENGINEERING (Trinity College) 



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\begin{gathered}
\text { 1929-1930 } \\
\text { ANNOUNCEMENTS FOR 1930-1931 }
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## ANNUAL CATALOGUES AND BULLETINS

For general catalogue of Duke University apply to The Secretary, Duke University, Durham, N. C.

For catalogue on Undergraduate Instruction, apply to The Secretary, Duke University, Durham, N. C.

For catalogue on The Graduate School of Arts and Sciences, apply to The Dean of the Graduate School, Duke University, Durham, N. C.

For bulletin on The School of Religion, apply to The School of Religion, Duke University, Durham, N. C.

For bulletin on The Department of Engineering, apply to The Secretary, Duke University, Durham, N. C.

For bulletin on The Summer Schools, apply to The Director of the Summer Schools, Duke University, Durham, N. C.

For bulletin of The School of Medicine, apply to The Dean of the School of Medicine, Duke University, Durham, N. C.

# Duke University 



DEPARTMENTS OF ENGINEERING (Trinity College)

## 1929-1930

ANNOUNCEMENTS FOR 1930-1931

DURHAM, NORTH CAROLINA
1930

## UNIVERSITY CALENDAR

1930

| June | 7. | Saturday-Registration of local students for Summer School, first term. |
| :---: | :---: | :---: |
| June | 9. | Monday-Registration of students for Summer School, first term. |
| June | 10. | Tuesday-Instruction begins for Summer School, first term. |
| July | 4. | Friday-Independence Day-A holiday. |
| July | 18-19. | Friday, Saturday-Final Examinations for Sum School, first term. |
| July | 21. | Monday-Instruction begins for Summer School, second term. |
| Aug. | 27-28. | Wednesday, Thursday-Final Examinations for Summer School, second term. |
| Sept. | 17. | Wednesday, 9 A.m.-Assembly for all Freshmen. Freshmen orientation program begins. 10 A.m.-Entrance examinations for students not admitted by certificate. |

Sept.
20. Saturday, 4 p.m.-First regular faculty meeting of the academic year.
Sept. 22. Monday-Freshmen instruction begins.
Sept. 23. Tuesday-Registration and matriculation of new students with advanced standing.
Sept. 24. Wednesday-Formal opening of college. Registration of matriculated students.
Sept. 25. Thursday-Recitations for Sophomores, Juniors, and Seniors begin.
Sept. 25-26-27. Thursday, 9 A.m. to 1 p.м., $2: 30$ p.м. to 4 p.м., Friday, 9 A.M. to 1 P.M., $2: 30$ P.M. to 5 P.m., Saturday, 9 A.M. to 1 P.M.-Registration of graduate students.

Nov. 11. Tuesday-Armistice Day-Part holiday-Public exercises.
Nov. 19-22. Wednesday, Thursday, Friday, and Saturday-Midsemester examinations.
Nov. 27. Thursday-Thanksgiving Day-A holiday.
Dec. 11. Thursday-Duke University Day-Not a holiday.
Dec. 22. Monday, 1 p.M.-Christmas recess begins.
1931
Jan.
3. Saturday, $8: 30$ A.M.-Instruction is resumed.

Jan.
21. Wednesday-Mid-year examinations begin.

Jan. 31. Saturday-Last day for matriculation for second semester.

Feb.
Feb.

Feb. 23. Monday-A holiday-Civic Celebration in honor of Washington's birthday.
Mar. 25-28. Wednesday, Thursday, Friday, and Saturday-Midsemester examinations.

Apr. 1. Wednesday-Last day for submitting orations for Wiley Gray Contest.
2. Thursday, 4 P.M.-Easter recess begins.
7. Tuesday, 8:30 A.m.-Instruction is resumed.

1. Friday-Last day for selection of courses for ensuing year.
May 28. Thursday-Final examinations begin.
June 7. Sunday-President's address to graduating class.
June 8. Monday-Annual meeting of the Board of Trustees.
June
June 8. Monday evening-Graduating orations.
June
June

June
June 10. Wednesday morning-Commencement address; graduating exercises.
June 10. Wednesday afternoon at sunset-Lowering of the Flag by the graduating class.

## ADMINISTRATIVE OFFICERS

William Preston Feiv, A.B., A.M., Ph.D., Ll.D.
President of the Unizersity . Duke University Campus
Robert Lee Flowers, A.M., LL.D. Duke University Campus
Secretary and Treasurer of the University
William Hane Wannamaker, A.B., A.M., Litt.D.
Dean of the University 402 Buchanan Boulevard
Herbert James Herring, A.B., A.M. Ambassador Apartments Assistant Dean of the College
Dean Moxley Arnold, B.S., A.M.
Faculty Apartments Assistant Dean for Freshmen

## INSTRUCTIONAL STAFF

Harold Crusius Bird, Ph.B., C.E.
2415 Club Boulevard Professor of Civil Engineering, Head of Department of Civil and Mechanical Engineering
William Holland Hall, A.B., A.M., B.C.E., M.S.C.E. Faculty Club Professor of Engineering
Samuel Raymond Schealer, E.E., M.S.
Hope Valley
Professor of Electrical Engineering,
Head of Department of Electrical Engineering
Walter James Seeley, E.E., M.S.
1305 B. St.
Professor of Electrical Engineering.
Instructor in Mechanical Engineering

William Whitfield Elliott, B.A., M.A., Ph.D. Faculty Club Professor of Mathematics
Walter Kirkland Greene, A.B., A.M., Ph.D. 314 W. Trinity Ave. Professor of English
Charles Cleveland Hatley, A.B., A.M., Ph.D. Professor of Physics
Frank Kirby Mitchell, A.B., A.M. 708 Buchanan Boulevard Associate Professor of English
Karl Bachman Patterson, A.B., A.M. 1024 Monmouth Ave. Assistant Professor of Mathematics

Robert North Wilson, A.B., M.S. 822 Third St. Professor of Chemistry
Benjamin Ulysses Ratchford, A.B., A.M. 113 Faculty Apartments Instructor in Economics

John Herman Shields, A.B., A.M. 1007 W. Trinity Ave.
Instructor in Accounting

Assisted by members of general faculty, listed in General Catalogue.

## ENGINEERING COURSES OFFERED

Duke University through the departments of engineering of Trinity College now offers standard four-year courses in civil and electrical engineering, and will in 1930-31 offer a course in mechanical engineering to which Freshmen will be admitted in 1930.

The University is situated most advantageously to offer courses in these departments. The South and, in particular, the Piedmont section of North Carolina is rapidly becoming industrialized. Many industries from the North are being moved to this section because of the cheap and abundant hydroelectric power, and North Carolina's progress in building excellent highway systems, in erecting large hotels and office buildings, in city planning, in installing new municipal water and sewerage systems, and especially, in developing its water power resources, is known throughout the country.

Along with this development. Duke University-through the great foundation set up by Mr. James B. Duke in $1924-$ is expanding from a relatively small college into a great university. By the Fall of 1930 a large part of the University will be occupying the new buildings erected on a 4500 acre campus about a mile to the westward of the present Trinity College campus. In this comprehensive building program the students in engineering have excellent opportunities to study steel construction, reinforced concrete, sewers, steam and water systems, highway building, modern lighting systems, and methods of electric power distribution.

The entire curricula in civil and electrical engineering have been recently revised and conform very closely to the standards set up by the Society for the Promotion of Engineering Edu-
cation. The fundamentals of all engineering, such as English, mathematics, chemistry, physics, drawing, mechanics, strength of materials, and hydraulics are emphasized. About forty semester-hours are devoted to the major engineering group. The need for engineers to fill administrative positions is recognized by giving the student opportunity to elect subjects in the department of economics and business administration. The curriculum has been planned to prepare men for professional work in civil and electrical engineering-especially design and construction. The rigorous training of an engineering curriculum with proper courses in the department of business administration, affords an excellent preparation for business where men with the engineering type of training are required.

The entire engineering staff hold graduate degrees from leading universities and were chosen particularly for their ability to teach. Instruction is given in small sections, insuring personal attention. The laboratory is used to supplement the class-room and at present the same instructor carries his class through both the class-room and laboratory work, which is only possible where the classes are limited in size.

Engineering students are in every sense a part of the student body of Duke University, enjoying the general advantages of the University and being subject to the general rules and regulations.

Selection of engineering students will be made on the basis of character, high school record, and results of placement tests held during Freshman Week. Candidates for the engineering courses should review their mathematics before taking these tests.

## EQUIPMENT

The Civil Engineering Laboratories are now located in the Asbury Building and the basement of the Science Building. The heavier equipment, consisting of a 50,000 pound universal testing machine, a 100 ton hydraulic press, abrasion machine, diamond core drill, diamond saw and lap, impact machine-for use in strength of materials and highway testing-is located in the Science Building. The lighter equipment, consisting of a Beggs deformeter, electric calculating machine, surveying instruments of the latest types, apparatus for stream flow meas-
urements and complete equipment for the testing of cement and bituminous materials, is located in the Asbury Building. Complete equipment for the testing of water and sewage will be installed during the coming year.

Two well-lighted Drawing Rooms with up-to-date furniture are located in the Asbury Building.

The Electrical Engineering Machinery Laboratory, located in the basement of Asbury Building, receives its electric power from the Duke Power Company over a 2300 volt, 60 cycle, three-phase line. The laboratory equipment includes a $17 \frac{1}{2}$ K.W., A.C. to D.C. motor-generator set for supplying the laboratory with direct current, three direct connected D.C. to D.C. motor-generator sets, two D.C. to A.C. belted sets, a G.E. sine wave motor-generator set, a Westinghouse phase displacement dynamometer, a General Electric type A.C.P.C. synchronous converter, for one-, two-, three-, or six-phase operation, a selfstarting single-phase battery charging converter, numerous single-phase constant potential transformers, a three-phase transformer, a constant current transformer equipped with a typical load of series street lamps, a three-phase induction regulator, numerous loading devices both electrical and mechanical, and a number of miscellaneous D.C. and A.C. motors and generators. In addition the equipment includes a complete line of measuring instruments for general testing purposes and an oscillograph for viewing and photographing wave forms.

The High Frequency Laboratory, also located in Asbury Building, contains apparatus for carrying out experiments at both audio and radio frequencies. Oscillators are available for generating alternating currents varying in frequency from 60 cycles to 75,000 cycles per second. An impedance bridge for both audible and carrier frequencies, and appropriate detectors and amplifiers are available for making measurements on filters and various circuit combinations. There are standards of resistance, inductance and capacitance; vacuum tube apparatus for determining characteristics of all types of tubes; and auxiliary apparatus for the determination of circuit constants at radio frequencies. Amateur radio station W 4 HP is maintained in connection with this laboratory.

Mechanical Engineering Laboratories. Plans are now under way for the purchase of suitable equipment to provide for the courses in Mechanical Engineering.

The Engineering Departmental Library of approximately one thousand volumes of modern engineering texts, in addition to approximately five hundred bound volumes of periodicals, supplemented by the main University Library, offers ample opportunity for reference. With generous annual appropriations this library is rapidly expanding to provide for research requirements.

## ADMISSION TO COLLEGE

## GENERAL REGULATIONS

Applicants able to submit certificates of proficiency in subjects accepted for admission to the freshman class from schools whose work has been approved by the University will be admitted without examination, provided these certificates are properly made out on the regular blank provided by the University, signed by the school principal, and presented before or at the opening of the academic year. The applicant must have completed the course of the school from which he comes. Unless admitted on certificate, every candidate for admission will be examined on the required subjects.

Entrance examinations for the admission of new students will be held on the dates amnounced in the calendar of the University. All students applying for admission must appear before the Committee on Admission on Wednesday, September 17. Wednesday, September 17, Thursday, September 18, Friday, September 19, and Saturday. September 20, will be devoted to the registration, sectioning, and classification of new students. The first part of this period is devoted to placement tests and to qualifying examinations in English, mathematics, and foreign languages for all Freshmen. Students whose certificates have not been accepted take entrance examinations at this time.

New students with advanced standing from other institutions are requested to appear before the Committee on Admission, Tuesday, September 23. Students who register and matriculate later than the dates named in the University calendar must pay the Treasurer five dollars for the privilege.

It is strongly recommended to parents and guardians that all applicants for admission to Duke University be successfully vaccinated against smallpox and typhoid fever before they enter.

## REQUIREMENTS FOR ADMISSION

The requirements for admission are defined in terms of units. A unit of credit is allowed for a subject of study pursued throughout an academic year at an accredited high school,
if the course has demanded five recitations a week and the prescribed amount of work has been satisfactorily completed. Credit for fifteen units is required for admission to all groups.

The subjects in which credit for admission to the University may be offered and the maximum amount of credit acceptable in each subject are given in the following table:

UNITS
UNITS
English .......................................... 4 Botany ............................................ 1
Latin ............................................. 4 Zoölogy .......................................... 1
Greek ............................................. 3 General Biology ........................... 1
German ......................................... 3 Physical Geography ..................... 1
French ........................................... 3 General Science ........................... 1
Spanish ......................................... 3 Agriculture .................................... 2
Mathematics ................................ 4 Mechanical Drawing ................... 2

Chemistry ...................................... 1 Household Economics ................. 2
Commercial Subjects .................. 3
Minimum entrance credits of three units in English, one in history, three in mathematics, and four in foreign languages (either all in Latin or two in each of any two of the foreign languages accepted for admission, including Latin) are required of all applicants for candidacy for the bachelor of science degree. However, in case the fifteen units of credit for admission do not include the full requirements in foreign languages, the student is given an opportunity during his freshman year to make up the deficiency.

## REQUREMENTS FOR THE DEGREE OF BACHELOR OF SCIENCE IN CIVIL OR ELECTRICAL ENGINEERING

The studies for the degree of bachelor of science are designed for students who are preparing for civil or electrical engineering as a profession and lead to the degree of bachelor of science in civil engineering (B.S. in C.E.), or bachelor of science in electrical engineering (B.S. in E.E.).

Either of these degrees requires one hundred and thirtyeight semester-hours of work. Six semester-hours of electives must be taken in the department of economics or political science. If a foreign language is elected it must be taken two years unless a student has sufficient entrance credits to enable him to pursue a more advanced course.

## Civil Engineering

## Freshman Year

FIRST SEMESTER
SECOND SEMESTER
S.H. S.H.

Chemistry 1 ................................... 4 Chemistry 2 .................................... 4
English .......................................... 3 English .......................................... 3
Mathematics 10 ............................. 5 Mathematics 10 ............................. 5
Bible 1 ............................................ 3 Bible 2 ............................................ 3
Drawing 1 .................................... 2 Drawing 2 .................................... 2
Physical Education ......................R Physical Education ..................... R
17 17
Three weeks of Surveying 10 in summer. Credit, 3 semester-hours.

> Sophomore Year

English .......................................... 3 English .......................................... 3
Mathematics 25 ........................... 4 Mathematics 30 ........................... 4
Physics for Engineers 53 .......... 5 Physics for Engineers 54 .......... 5
Surveying 11 ................................ 2 Mechanics 6 ................................... 4
Descriptive Geometry 3 .............. 2
Physical Education ...................... R Physical Education ...................... R
$16 \quad 16$
Junior Year
Electrical Eng. 153 ....................... 3 Hydrology 122 .............................. 3
Hydraulics 107 ............................. 4 Strength of Materials 108 .......... 3
Materials 109 ................................. 2 Curves and Earthwork 112 ........ 3
Highways 115 ................................ 2 Surveying 114 ............................... 3
Electives ........................................ 6 Electives ........................................ 6
$\overline{17} \quad \overline{18}$
Senior Year
Water Supply 123 ........................ 2 Sewerage 124 ................................. 2
Structures 131 ............................ 3 Structures 132 .............................. 4
Reinforced Concrete 133 ............ 3 Masonry 134 ................................. 3
Railroad Engineering 117 .......... 3 Highways 116 ............................... 2
Electives ........................................ 6 Electives ........................................ 6
17 17
Electrical EngineeringFreshman Year
FIRST SEMESTER SECOND SEMESTER
S.H. ..... S.H.
Chemistry 1 4 Chemistry 2 ..... 4
English 3 English ..... 3
Mathematics 10 5 Mathematics 10 ..... 5
Bible 1 3 Bible 2 ..... 3
Drawing 1 2 Drawing 2 ..... 2
Physical Education R Physical Education ..... R
17 ..... 17
Three weeks of Surveying 10 in summer. Credit, 3 semester-hours.
Sophomore Year
English 3 English ..... 3
Mathematics 25 4 Mathematics 30 ..... 4
Physics for Engineers 53 5 Physics for Engineers 54 ..... 5
Mechanism 81 2 Mechanics 6 ..... 4
Descriptive Geometry 3 ..... 2
Physical Education Physical Education ..... R
16 ..... 16
Junior Year
Princ. of Elec. Eng. 151 4 Princ. of Elec. Eng. 152 ..... 4
Hydraulics 107 4 Strength of Materials 8 ..... 3
Differ. Equations 231 3 Elec. Measurements ..... 3
Thermodynamics 183 3 Thermodynamics 184 ..... 3
Electives 3 Electives ..... 3
17 ..... 16
Senior Year
Direct Currents 155 3 Electrical Machinery 154 ..... 6
Alternating Currents 157 3 Electric Power Stations 158 ..... 3
Elec. Pow. Transmission 159 3 High Freq. Currents 162 ..... 3
High Freq. Currents 161 ..... 3
Electives 6 Electives ..... 6
18 ..... 18

## DEPARTMENT OF CIVIL AND MECHANICAL ENGINEERING

Asbury Building
PROFESSORS BIRD, HALL, AND MR.
With the exception of course 10 , odd-numbered courses are offered in the first semester, even-numbered courses in the second semester.

## DRAWING

1-2. Engineering Drawing.-Orthographic projection, lettering, pictorial representation, intersections, and developments. 4 s.h.

Messrs. Bird and Mr.
3. Descriptive Geometry.-Problems relating to point, line, plane, solid. Prerequisite, course 1-2. 2 s.h.

Mr.

## MECHANICS

6. Mechanics.-Concurrent forces, parallel forces, non-concurrent and non-parallel forces, centroids, friction, moment of inertia, translation, rotation, work, energy, momentum. Prerequisite, Mathematics 25. 4 s.h. Mr. Bird
7. Hydraulics.-Hydrostatics; flow of water through orifices, weirs, pipes, and open channels; general principles of water wheels and turbines. Prerequisite, course 6. 4 s.h.

Mr. Hall
108. Strength of Materials.-Elastic bodies under stress; flexure of simple, overhanging, fixed, and continuous beams; columns; combined stresses; etc. Prerequisite, course 6. 3 s.h. Mr. Bird
109. Materials of Engineering.-Study and testing of materials. One class and one three-hour laboratory period weekly. 2 s.h. Mr. Bird

## CIVIL ENGINEERING

10. Plane Surveying.-Exercise in use of chain, tape, compass, level, transit, and plane-table; surveys and resurveys. Eight hours a day, three weeks. Summer school. 3 s.h. Messrs. Bird and Hali.
[For fee for this course, see bulletin of the Summer School.]
11. Plane Surveying.-Care and adjustment of instruments, differential and profile leveling, use of sextant, transit surveys. Prerequisite, 10. 2 s.h.

Mr. Hall
112. Curves and Earthwork.-Simple, compound, and easement curves, earthwork computations, and mass diagrams as applied to highway work; observations on Sun and polars for latitude, time, and azimuth. 3 s.h.

Mr. Hall
114. Advanced Surveying.-Field work in connection with course 112. Slope staking, earthwork, simple and compound curves; determination of meridian by observations on Polaris and Sun. Concurrent with course 112. 3 s.h.

Mr. Hall
115. Highway Engineering.-Location, construction, and maintenance of roads and pavements; dust prevention; road economics. 2 s.h.

Mr. Hall
116. Highway Engineering.-Testing of cement, sand, stone, gravel, and bituminous materials. 2 s.h.

Mr. Hall
117. Railroad Engineering.-Construction and maintenance of track and track-work, economics, operating conditions affecting location. 3 s.h.

Mr. Bird
122. Hydrology.-Factors affecting precipitation, evaporation from land and water surfaces, relation of precipitation to run-off, estimating runoff, floods and flood flows, applications of hydrology. Prerequisite, course 107. 3 s.h.

Mr. Hall
123. Public Water Supply.-Quantity and quality of water required, hydraulics of wells, reservoirs, works for purification and distribution of water, tests and standards of purity of water for drinking purposes. Prerequisite, course 122. 2 s.h.

Mr. Hall
124. Sewerage.-Sewerage systems, rainfall and storm water flow, size of storm and sanitary sewers, sewage disposal. Prerequisite, course 122. 2 s.h.

Mr. Hall
131. Steel Structures-Stresses.-Roofs, parallel chord bridges under all types of loads, inclined top chord bridges including sub-divided panels, wind bracing. Prerequisite, course 6. 3 s.h.

Mr. Bird
132. Steel Structures-Design.-Built beams, plate girders, tension members, compression members, tension and compression members, end posts, stringers, floor beams, pins, plates, etc. Drafting. Prerequisites, courses 108, 131. 4 s.h.

Mr. Bird
133. Reinforced Concrete.-Theory and design of reinforced concrete beams, slabs, columns. Prerequisite, course 108. 3 s.h. Mr. Bird
134. Masonry Structures.-Ordinary foundations, dams, retaining walls, arches, piers, abutments. Prerequisites, courses 108, 133. 3 s.h.

Mr. Bird
240. Indeterminate Structures.-Introductory course dealing with the application of theory of least work, deflection, and rotation to indeterminate stresses. Problems are solved analytically, graphically, and by deformeter. Prerequisite, course 131. 3 s.h.

Mr. Bird

## MECHANICAL ENGINEERING

81. Elements of Mechanism-A short course covering revolving and oscillating bodies, drives, transmissions, gears, gear trains, cams, linkages, and miscellaneous composite mechanisms. Prerequisite, Freshman Mathematics. 2 s.h.

Mr.

183-184. Elementary Thermodynamics and Heat Engines.—Introduction to the principles and applications of thermodynamics. A study of the properties of steam and the equipment for its generation and utilization, with some time spent on the internal-combustion engine. Inspection trips are made to neighboring power plants. Prerequisites, Physics 53-54. Mathematics 25,30 (or concurrent). 6 s.h.

Mr.

# DEPARTMENT OF ELECTRICAL ENGINEERING 

## Asbury Building PROFESSORS SCHEALER AND SEELEY

151-152. Principles of Electrical Engineering.-An elementary course covering direct and alternating currents and the fundamental principles of direct and alternating current machinery. This course serves as a general introductory course for electrical engineering students. Prerequisites, Physics $53-54$, Mathematics 25,30 (or concurrent). 8 s.h.

Mr. Seeley
153. Principles of Electrical Engineering.-A short elementary course covering the principles of direct current and alternating current machinery, especially designed for students in civil engineering. Prerequisite, Physics 53-54. 3 s.h.

Mr. Schealer
155. Principles of Electrical Engineering: Advanced Direct Current Machin-ery.-A study of the principles which underlie the design and operation of all types of direct current machinery. Prerequisites, course 151-152, Mathematics 25, 30. 3 s.h. Mr. Schealer
157. Principles of Electrical Engineering: Advanced Alternating Currents.The algebra of vectors and complex quantities used in electrical engineering. An advanced course in alternating currents and alternating current circuits. Prerequisites, course 151-152, Mathematics 25, 30. 3 s.h. Mr. Schealer
154. Principles of Electrical Engineering: Advanced Alternating Current Machinery.-The principles underlying the construction and operation of alternating current machinery. A study of synchronous generators and motors, parallel operation of alternators, polyphase and single phase induction motors, series and repulsion motors, synchronous converters, static transformers. Prerequisite, course 157. 6 s.h. Mr. Schealer
159. Electric Power Transmission.-A course of lectures and recitations on the factors involved in the transmission of electrical energy over long distances and the use of hyperbolic functions in the solution of transmission line problems. Concurrent with course 157. Prerequisite, course 151-152. 3 s.h.

Mr. Schealer
156. Electric Railways.-A course of lectures and recitations relating to the construction, operation, and equipment of different types of electric railways. Prerequisites, courses 151-152, 155.3 s.h.

Mr. Schealer

161-162. High Frequency Alternating Currents.-An advanced course on the principles of wire and wireless communciation. A thorough study is made of the theory of coupled circuits, antenna radiation, wave propagation over metallic circuits, nature of speech and sound, vacuum tubes, vacuum tube circuits, wire and wireless telephone circuits. Prerequisite, Mathematics 231 . 6 s.h.

Mr. Seeley
158. Electric Power Stations.-A course of lectures and recitations pertaining to the design, construction and operation of electric power stations, both steam and hydraulic. Consideration of prime movers; generating machinery; powdered fuel and stoker equipment; switchboards; instruments and protective devices; operation and management; visits to neighboring plants. Prerequisites, courses 151-152, 183-184. 3 s.h.

Mr. Schealer

## REQUIRED NON-ENGINEERING SUBJECTS


#### Abstract

1-2. General lnorganic Chemistry.--Lectures, recitations, and laboratory work on the elementary principles of chemistry and on the occurrence, preparation, properties, and uses of the elements and their compounds. It is desirable, though not required, that students taking this course shall have taken elementary physics either in high school or in college. One lecture, two recitations, and three laboratory hours, throughout the year 8 s.h.

Professor Wilson with Professor Gross, Assistant Professors Vosburgh and Bigelow, Dr. Hauser, Dr. Bolich, Mr. Saylor, and Messrs. Elmore, Gillespie, and Priepke


1-2. English Composition and English Poetry.-During the first semester the work of the course consists chiefly of composition; during the second term it is divided between the study of literature and writing. 6 s.h.

Associate Professor Mitchell, Messrs. Jordan, Blackburn, Patton, Ward, Gregory, and Sugden, and Mrs. Vance

Students who receive a grade of 75 or more in the work of composition of both semesters and a grade of 75 or more in the work in literature are transferred on recommendation of their instructors to sections of English 5-6 for work in English during their sophomore year. Those whose grades in the work of composition of both semesters fall between 70 and 75 are transferred for work in English during their sophomore year to sections of English 3-4. Those students who do not earn a grade of 70 in composition during the first semester are required to continue the study of composition during the second semester; if they earn the passing grade of 70 or more in the work of composition at the end of the second semester, they receive credit for the first half-year of work, and during their sophomore year they do the work of the second semester of English 1-2. Students whose grades in the work of composition for both semesters fall below 70 must repeat the entire course during their second year.

3-4. English Composition.-A second course in composition for Sophomores. 6 s.h.

Mr. Jordan
Students who are required to take English 3-4 may take English 5-6 as an elective.

5-6. Prose Literature.-This course consists of a reading and study of selected works of the best writers of prose. Lectures are given on the lives of the authors studied, the periods of literary history, and the origin and growth of the various types of prose literature. Special emphasis is placed upon the study of biography. 6 s.h.

Professor Greene, Messrs. Blackburn and Patton, and Mrs. Vance and Mrs. White

English 5-6 or 3-4 is required of all Sophomores ; English 5-6 is open as an elective to all undergraduates who do not take it as a required course. Sophomores who passed English 1-2 with recommendation to sections of English 5-6 may take 3-4 as their required English in their second year and carry English 5-6 as an elective. English 5-6 or its equivalent is required of all students who do their major work in English.
10. Engineering Mathematics.-This course, including College Algebra, Plane Trigonometry, and Plane Analytic Geometry, is given especially for engineering students. 10 s.h.

Staff
25. Differential Calculus.-Each semester. 4 s.h.

Staff
Prerequisite, course 10.
30. Integral Calculus.-Each semester. 4 s.h.

Staff Prerequisites, courses 10 and 25.
231. Differential Equations.-A study of the more common types of ordinary differential equations. Primarily a problem course for engineers. 3 s.h.

Professor Elliott
Prerequisite, course 30 .
53-54. Physics for Engineers.-A course in general physics which gives special emphasis to engineering problems. Open to Sophomores who have completed trigonometry. Four hours recitation and three hours laboratory. 10 s.h.

Professor Hatley and Assistant Professor Collins

## RECOMMENDED ELECTIVE SUBJECTS

1. Principles of Economics.-This course must be taken by all students planning to elect further courses in economics and business administration. 6 s.h.

Professors Hoover and Hamilton, and Assistant Professors Roberts, Gray, and Landon, and Messrs. Harvill and Smith
7. First-Year Accounting.-Elementary principles of single proprietorship, partnership, and corporation accounting. Supervised laboratory periods will be assigned. 6 s.h.

Professor Cotton and Messrs. Shields and Whitman
104. Corporation Finance.-A study of the growth of corporations, their organization and securities; methods of financing; problems connected with the management of capital and the distribution of earnings; the promotion and financing of corporate consolidations; corporate insolvency and reorganization. First semester. 3 s.h. Mr. Ratchford

Prerequisite, course 1.
106. Railway, Ocean, and Inland Waterway Transportation.-History of the development of railways in the United States. Railway organization and finance; traffic management; federal and state regulation of railroads; the present status of the railroad problem. Inland water transportation. Ocean transportation. Collateral reading and the preparation of term papers are required. 3 s.h. Mr. Harvill
[Not offered in 1930-31]
178. Business Law,-The fundamental principles of law as applied to common business transactions. The topics presented are: contracts, agency, bailments, sales, negotiable instruments, partnership, corporations, and bankruptcy. Textbook: Bays, Business Law. Casebook: Bays, Cases on Commercial Law. Required of Seniors in the Business Administration group. 6 s.h. Assistant Professor Towe
151. Public Speaking.-A course in the fundamentals of public speaking with emphasis upon the effective presentation of ideas. 3 s.h. Mr. Herring
152. Argumentation.-A course dealing with the principles of argumentation and debating with special emphasis upon brief-making and prac-tice-speaking. Public questions are studied as parallel work. 3 s.h.

Mr. Herring
51. General Bacteriology.-Laboratory and lectures. 4 s.h.

Mr. Blomquist
101. Introduction to Psychology: General Principles.-Lectures, demonstrations, prescribed reading and reports. 3 s.h.

Professor McDougall and Drs. Rhine and Zener
101-102. General Sociology.-An introduction to the scientific study of social life, its origin, evolution, and organization, as illustrated by a number of concrete social problelms. 6 s.h. Professor Ellwood

## FEES AND EXPENSES

The following tables show the general fees and charges collected from all students and the special fees collected from those taking courses in the sciences. All fees for each semester are due and payable, unless otherwise specified, at the time of registration at the beginning of that semester, and no student is admitted to classes until his fees have been paid.

## GENERAL FEES

Matriculation, per semester ..... \$25.00
Tuition, per semester ..... 75.00
Room rent, per semester (two in room) ..... 62.50
Athletic fee, admitting students to all athletic contests held on the University grounds, per semester ..... 5.00
$\dagger$ Damage fee, payable annually at the time of first registration ..... 1.00
Medical fee, payable annually at beginning of the second semester ..... 2.00
Library fee, per semester ..... 5.00
Commencement fee, payable annually at the beginning of the sec- ond semester ..... 3.00
Publication fee:
First semester ..... 2.50
Second semester ..... 3.00
Diploma fee, payable by candidates for degrees at the beginning of the second semester; refunded if the diploma is not awarded ..... 5.00
For further information concerning room regulations, etc.,see Undergraduate Catalogue.
LABORATORY FEES
Botany 1 and 2 ..... \$2.50
Botany 51 and 151 ..... 5.00
Botany 52, 101, 102, 111, 112, and 52 ..... 2.00
Botany 201 ..... 4.00
Chemistry $1,2,21,30,41,261,262,215,216,231,232,240$, and 260 ..... 6.00
Chemistry 151, 152, 241, 244, 253, 254, and 256 ..... 7.50
Civil Engineering 10 -See Summer School catalogue. Civil Engineering 11, 114 ..... 1.00
Electrical Engineering 151, 152, 153, 154, 155, 161, and 162 ..... 2.00
Physics, all courses ..... 2.00
Zoölogy, all courses (except 1 and 2) ..... 3.00
Zoölogy 1 and 2 ..... 2.50

[^26]
## ESTIMATED EXPENSES FOR AN ACADEMIC YEAR

The necessary expenses of a student are moderate; the University dormitories provide thoroughly comfortable and wholesome living conditions at a minimum cost, while all charges made by the University have been kept low. Incidental expenses depend naturally upon the tastes and habits of the individual. The following table gives the necessary college expenses for one year.

| Low | moderate | liberal |
| :---: | :---: | :---: |
| Tuition .......................................... $\$ 150.00$ | \$150.00 | \$150.00 |
| Matriculation ................................. 50.00 | 50.00 | 50.00 |
| Room-Rent .................................... 100.00 | 125.00 | 150.00 |
| Board ............................................. 225.00 | 225.00 | 225.00 |
| Laundry ......................................... 20.00 | 25.00 | 30.00 |
| Books ............................................. 22.50 | 30.00 | 45.00 |
| Commencement Fee ....................... 3.00 | 3.00 | 3.00 |
| Library Fee ................................... 10.00 | 10.00 | 10.00 |
| Athletic Fee .................................. 10.00 | 10.00 | 10.00 |
| Damage Fee .................................. 1.00 | 1.00 | 1.00 |
| Medical Fee .................................. 4.00 | 4.00 | 4.00 |
| Publication Fee ............................. 5.50 | 5.50 | 5.50 |
| Total................................... $\$ 601.00$ | \$638. 0 | \$683.50 |

Students who hold scholarships or other exemption from tuition will deduct one hundred and fifty dollars from the above totals.

## DORMITORIES

On the west campus there are three groups of dormitories, each group forming a quadrangle enclosing a court. For the present these groups of dormitories are designated as A, B, and C. They contain ample rooming quarters for all the men students.

## BOARDING ACCOMMODATIONS

Beginning with the academic year 1930-31 the University will open its dining hall in the Union on the west campus with accommodations sufficient to provide in a superior way for all resident men students. It is the policy of the University to furnish board to its students at actual cost. Charges for board will not exceed $\$ 25.00$ per month.

The Union is the logical center of student activities for men and it will be found desirable for male students to board in its supervised halls. In the Union are located the University Post Office, the University Store, the University Barber Shop, and all publication staff offices.

In addition to the Union dining halls a Coffee Shop will be operated for the convenience of students and visitors.



# BULLETIN <br> OF <br> Duke University 

## SCHOOL OF RELIGION



1929-1930
ANNOUNCEMENTS FOR 1930-1931

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## ANNUAL CATALOGUES AND BULLETINS

For general catalogue of Duke University apply to The Secretary, Duke University, Durham, N. C.

For catalogue of Undergraduate Instruction, apply to The Sccrctary, Duke University, Durham, N. C.

For catalogue of The Graduate School of Arts and Sciences, apply to The Dean of the Graduate School, Duke University, Durham, N. C.

For bulletin of The School of Religion, apply to The Registrar of the School of Religion, Duke University, Durham, N. C.

For bulletin of The Department of Engineering, apply to The Secretary, Duke University, Durham, N. C.

For bulletin of The Summer Schools, apply to The Dircctor of the Summer Schools, Duke University, Durham, N. C.

For bulletin of The School of Medicine, apply to The Dean of the School of Medicine, Duke University, Durham, N. C.

# BULLETIN <br> OF <br> Duke University 



SCHOOL OF RELIGION 1929-1930

ANNOUNCEMENTS FOR 1930-1931

## CALENDAR

1930

Sept.
Sept.
Sept.
Sept.
Oct.
Nov.
Nov.

Nov.
Dec.
Dec.
25. Thursday, 4 p.m.-First regular faculty meeting.

26-27. Friday and Saturday-Matriculation and registration of students.
29. Monday, 8:30 A.m.-Instruction begins.
30. Tuesday, 11 А.м.-Formal opening exercises.
15. Wednesday-Fall retreat.

1. Saturday-Last day for submitting subject for B.D. thesis.
2. Tuesday-Armistice Day-Part holiday-Public exercises.
3. Thursday-Thanksgiving Day-A holiday.
4. Thursday-Duke University Day-Not a holiday.

1931
Jan.
3. Saturday, 8:30 А.m.-Instruction is resumed.
21. Wednesday-Mid-year examinations begin.

Jan.
Jan.
Feb.
Feb.
Apr.
Apr.
May
22. Monday, 1 p.m.-Christmas recess begins.

30-31. Friday and Saturday-Matriculation and registration for second semester.
2. Monday-Second semester begins.
23. Monday-A holiday-Civic celebration in honor of Washington's birthday.
2. Thursday, 4 p.m.-Easter recess begins.
7. Tuesday, 8:30 A.m.-Instruction is resumed.

May
May
6. Wednesday-Spring retreat.
15. Friday-Last day for submitting B.D. thesis.
28. Thursday-Final examinations begin.

June 5. Friday, 4 P.m.-Dean's reception to graduating class.
June
June
June
June
June
June
June
7. Sunday-President's address to graduating class.
8. Monday evening-Graduating orations.
9. Tuesday morning-Commencement sermon.
9. Tuesday afternoon-Alumni address-Meeting of Alumni Association.
9. Tuesday evening-Alumni exercises.
10. Wednesday morning-Commencement address; graduating exercises.
10. Wednesday afternoon at sumset-Lowering of the Flag by the graduating class.

# OFFICERS OF ADMINISTRATION 

WILLIAM PRESTON FEW, A.B., A.M., Ph.D., LL.D. President of the University<br>ROBERT LEE FLOWERS, A.M., LL.D.<br>Vice-President in the Business Division, Secretary, and Treasurer of the University<br>WILLIAM HANE WANNAMAKER, A.B., A.M., Litt.D.<br>Vice-President in the Educational Division of the University<br>ELBERT RUSSELL, A.B., A.M., Ph.D.<br>Dean of the School of Religion<br>PAUL NEFF GARBER, A.B., A.M., Ph.D.<br>Registrar of the School of Religion

## COMMITTEES OF THE FACULTY

Registration and Advanced Standing-The Registrar, the Dean, Professor Cannon.

Public Exercises-Dean Russell, Professors Branscomb, Garber, Hickman, Rowe.
Library-Professors Branscomb, Cannon, Godbey.
Extension-Professors Hickman, Rowe, Stanbury.
Representatives on Joint Committee on Junaluska School of RcligionPresident Few, Dean Russell, Professor Garber.

# OFFICERS OF INSTRUCTION 

> ELBERT RUSSELL, A.B., A.M., Ph.D.
> Dean of the School of Religion and Professor of Biblical Interpretation
> BENNETT HARVIE BRANSCOMB, A.B., B.A., M.A. (Oxon) Professor of New Testament PAUL NEFF GARBER, A.B., A.M., Ph.D. Registrar of the School of Religion and Professor of Church History JAMES CANNON, III, A.B., A.M., Th.B., Th.M. Ivey Professor of History of Religion and Missions
> ALLEN HOWARD GODBEY, A.M., Ph.D. Professor of Old Testament FRANKLIN SIMPSON HICKMAN, A.B., A.M., S.T.B., Ph.D. Professor of Psychology of Religion
> GILBERT THEODORE ROWE, A.B., D.D., Litt.D. Professor of Christian Doctrine
> WALTER ALBERT STANBURY, A.B., D.D. Professor of Practical Theology HERSEY EVERETT SPENCE, A.B., A.M., B.D. Professor of Religious Education JESSE MARVIN ORMOND, A.B., B.D. Professor of Rural Sociology
> HIRAM EARL MYERS, A.B.. S.T.B., S.T.M. Professor of English Bible
> WILLIAM IVEY CRANFORD, A.B., Ph.D. Carr Professor of Philosophy
> CHARLES ABRAM ELLWOOD, Ph.B., Ph.D., LL.D. Professor of Sociology
> LAWRENCE CALVIN LITTLE, A.B., A.M.
> Instructor in Religious Education
> JAMES FOSTER BARNES, A.B., A.M.
> Instructor in Church Music

# SCHOOL OF RELIGION IN DUKE UNIVERSITY 

## HISTORICAL STATEMENT

The present Duke University has been gradually developed from a simple beginning in a local school established in the northwestern part of Randolph County, North Carolina, in 1838. This school was enlarged in 1840 and named Union Institute. In 1841 it was incorporated as Union Institute Academy by the legislature of North Carolina. Under the leadership of President Braxton Craven, the academy grew into an institution chartered as Normal College in 1851. An amendment to the charter in November, 1852, authorized Normal College to grant degrees, and two students were graduated in 1853 with the degree of bachelor of arts.

In 1859 the charter of Normal College was amended to place the institution under the control of the Methodist Episcopal Church, South, and the name was changed to Trinity College. Dr. John Franklin Crowell became president of Trinity College in 1887. The most important achievement of his administration was the removal of the college to Durham, North Carolina, which was accomplished by September, 1892.

President Crowell resigned in 1894 and was succeeded by the Reverend John Carlisle Kilgo, D.D. During President Kilgo's administration the endowment of Trinity College was greatly increased, the Library and other important buildings were erected, and notable progress was made in increasing the variety and improving the quality of the courses of instruction. A School of Law was established in 1904 by the gift of Messrs. James B. and Benjamin N. Duke. In 1910 President Kilgo was succeeded by Dr. William Preston Few.

Trinity College has experienced a great expansion in faculty, endowment, buildings, and equipment during President Few's administration. In December, 1924, Mr. James B. Duke established a $\$ 40,000,000$ trust fund for educational and charitable purposes. Trinity College accepted the terms of the indenture of trust on December 29. 1924, and on the following day the name of the institution was changed to Duke University.

Mr. Duke's death in 1925 was followed by the announcement of munificent provisions in his will for the development of the University which bears his family name.

## SCHOOL OF RELIGION

Trinity College was established by Christian men for the purpose of providing education for young men and women under distinctively Christian auspices. There has been no departure from this clearly defined aim. On the contrary there has been ever-increasing emphasis placed upon this feature of the work of the college, especially in the provision in the curriculum for a great variety of courses on the Bible and other religious subjects.

Through the gift of Mr. James B. Duke, the School of Religion and its curriculum have been separated from the work of the Department of Religion in Trinity College. Among those for whom his gift was intended Mr. Duke placed ministers first. He felt sure that his native state of North Carolina stood in need first of a better educated and more efficiently trained ministry. The organization of the School of Religion of Duke University, the first of the professional schools to start its work, is the carrying out of this intention on the part of Mr. Duke. The work of the School began with the academic year 1926-27, though the exercises formally opening the School were not held until November 9, 1926.

Duke University retains the same close relationship which Trinity College always held to the Conferences in North Carolina of the Methodist Episcopal Church, South. This legal relationship has always been broadly interpreted. Members of all other Christian denominations, as well as Methodists, will be made to feel welcome in the School of Religion and may be assured that the basis on which the work is conducted is broadly catholic and not narrowly denominational.

## THE PURPOSE OF THE SCHOOL OF RELIGION

Christian work has now expanded to the extent that it covers far more than the work of a preacher or minister. The School of Religion of Duke University purposes to offer training for all types of Christian service. This will include missionaries, teachers of Bible and other religious subjects in the
schools and colleges of the Church, directors of religious education, and social workers. In the future it is planned to fit the courses more completely to the needs of these workers. Still it must be kept clear that the minister in charge of a church, who is placed before the people to preach the Gospel of Christ, is the center and key to the whole problem of Christian work in the church. It is felt with strong conviction that the training of all Christian workers should be maintained on a high level. Consequently this School of Religion is organized on a strictly graduate basis. It is sincerely hoped that the standard thus set may increasingly influence the type of men and women entering Christian work and may lead them to demand the best of themselves in the prosecution of the work of Christ among men.

## RELATION OF THE SCHOOL OF RELIGION TO DUKE UNIVERSITY

As one of the coördinate schools of Duke University, the School of Religion is in closest touch with the other schools, particularly with Trinity College and with the Graduate School. Correspondence is invited from those who are interested in the possibility of securing degrees other than that of Bachelor of Divinity, which is granted upon recommendation of the faculty of the School of Religion. Seniors in Trinity College are admitted to certain courses in the School of Religion. Various privileges of Duke University are open to students of the School of Religion. Students in the School of Religion are expected to take part in the religious and social life of the University campus and to share in athletic interests and activities.

## REQUIREMENTS FOR ADMISSION

Candidates for matriculation must be graduates of colleges of recognized standing. They will be admitted without examination on presentation of an official transcript of all college credits and such other credits as they may have secured. This applies to students coming from foreign countries as well as to students from institutions in the United States. They must satisfy the faculty as to their Christian character and purpose. To this end a letter regarding a student's character and purpose from the pastor of his home church, a church official, or
some faculty member in the college where he did his undergraduate work, should be presented at the time of admission. Women will be admitted on the same conditions as men.

## ADMISSION TO ADVANCED STANDING

Students coming from colleges where departments of religion are maintained may be admitted to advanced courses in departments of the School of Religion in which they have done previous work as undergraduates. After one semester in residence, completing at least twelve semester-hours of work, students may make application to the faculty of the School of Religion for credit toward the Bachelor of Divinity degree for courses of senior-graduate rank taken as undergraduates.

## PART TIME SCHEDULES

Students who are not giving full time to their studies in the School of Religion may carry only limited schedules of class work.

## REQUIREMENTS FOR GRADUATION

The degree of Bachelor of Divinity will be conferred by Duke University on students in the School of Religion who satisfactorily complete the prescribed course of study, which consists of ninety semester-hours of work and a thesis. The course is planned to cover three years, of two semesters each, and students are urged to plan to spend in their theological studies the full time thus designated. In no case will the degree of Bachelor of Divinity be conferred on a student until he has spent at least two full semesters in residence in the School of Religion, and has satisfactorily completed a minimum of twentyfour semester-hours of work.

## THESIS

A thesis is required of all candidates for the degree of Bachelor of Divinity. It shall be of such a character as shall evidence a knowledge of the methods of research and an ability to conduct independent investigations. It shall be written upon some topic in the major field of study. The subject of the thesis must be approved by the professor in charge of the major field, and filed with the Dean of the School of Religion on or before November 1 of the academic year in which it is expected that
the degree will be conferred. The thesis shall be prepared under the supervision and guidance of the professor in charge of the major field. No student shall be allowed to write his thesis in absentia except on the approval of the dean and the professor in charge of the thesis. In all such cases regular reports as to the progress of the thesis must be made to the professor in charge.

The thesis shall be read by a committee of three members of the faculty of the School of Religion, one of whom shall be the professor under whose direction the thesis has been written, and two other members appointed by the dean, one of whom shall be of a department other than that in which the thesis is written. Each candidate shall be examined orally on his thesis by the committee appointed to read it, said examination not to exceed one hour in length. The thesis must be satisfactory to a majority of the members of the examining committee, including the representative of the department in which the thesis was written.

Three bound typewritten copies of the thesis must be submitted to the Dean of the School of Religion on or before May 15 of the year in which the degree is to be conferred. Theses submitted after that date shall not be considered as fulfilling the requirements for graduation in that academic year.

# REQUIREMENTS FOR THE DEGREE OF BACHELOR OF DIVINITY 

## GENERAL REQUIREMENTS

A candidate for the degree of Bachelor of Divinity must complete satisfactorily forty-five semester-hours of required work. These general requirements are divided among the departments of instruction in the following manner:

| Old Testament | 6 s.h. |
| :--- | ---: |
| New Testament | 9 s.h. |
| Christian Doctrine | 6 s.h. |
| Church History | 6 s.h. |
| Homiletics and Practical Theology | 6 s.h. |
| Religious Education | 6 s.h. |
| History of Religion and Missions | 6 s.h. |
|  | 45 s.h. | MAJOR ELECTIVES

Each student must select a major field in which he shall elect twelve semester-hours. This choice must be made by the end of the Middle year. A student may major in any of the departments of the School of Religion. He may also major in English Bible. To do this, he must complete in addition to the required work in the departments of Old Testament and New Testament nine semester-hours in the department of Old Testament and six semester-hours in the department of New Testament, exclusive of language.

12 s.h.

## FREE ELECTIVES

Thirty-three semester-hours are designated as free electives. These are to be elected by the student, subject to the approval of the faculty.

33 s.h.
90 s.h.

## REQUIRED COURSES AND ELECTIVES BY DEPARTMENTS

OLD TESTAMENT
Gencral requirement:
203-204. Introduction to the Old Testament

| Major and free electives: |  |
| :---: | :---: |
| 201-202. Introductory Hebrew | 6 s.h. |
| 301. Old Testament Theology | 3 s.h. |
| 302. The Exegesis of Selected Books of the Old Testament | s.h. |
| 305-306. Pre-Mosaic Hebrew Religion | 6 s.h. |
| 307-308. The Old Testament in Hebrew | 6 s.h. |
| 309-310. Ancient Oriental History | 6 s.h. |
| NEW TESTAMENT |  |
| General requirement: |  |
| 213-214. The Beginnings of Christianity | 6 s.h. |
| 311. The Life and Teachings of Jesus | 3 s.h. |
| Major and free electives: |  |
| 211-212. Hellenistic Greek | 6 s.h. |
| 217. The New Testament in Greek | 3 s.h. |
| 218. The Exegesis of Selected Books of the New Testament | 3 s.h. |
| 219. Life of Paul | 3 s.h. |
| 312. New Testament Theology | 3 s.h. |
| 313-314. The Exegesis of Selected Books of the New Testament | 6 s.h. |
| 315. Judaism at the Beginning of the Christian Era | 3 s.h. |
| 316. Hellenistic Religions at the Beginning of the Christian Era | 3 s.h. |
| CHRISTIAN DOCTRINE |  |
| General requirement: |  |
| 321. Introduction to the Science of Theology | 3 s.h. |
| 322. The Content of Christian Doctrine | 3 s.h. |
| Major and free electives: |  |
| 221. The Philosophy of Conduct | 3 s.h. |
| 222. Christian Ethics | 3 s.h. |
| 223-224. Idealism | 6 s.h. |
| 323. Theology in Ancient and Medieval Christianity | 3 s.h. |
| 324. Theology in Modern Christianity | 3 s.h. |
| 325. Soteriology | 3 s.h. |
| 326. Eschatology | 3 s.h. |

Additional courses for a major in this department are Old Testament 301 and New Testament 312.

## CHURCH HISTORY

General requirement:
233. Church History to the Reformation 3 s.h.
234. The History of the Evangelical Movement 3 s.h.

Major and free electives:
333. The Denominations in America: the Colonial Period 3 s.h.
334. The Denominations in America: the National Period 3 s.h.
335. Methodism 3 s.h.
336. Great Men of the Christian Church ..... 3 s.h.
337. Protestantism and Catholicism in Europe since 1800 ..... 3 s.h.
HOMILETICS AND PRACTICAL THEOLOGY
General requirement:
341. Homiletics, and either ..... 3 s.h.
342. Sermon Construction, or ..... 3 s.h.
343. Psychology of Preaching, or ..... 3 s.h.
344. History of Preaching, or ..... 3 s.h.
345. Pastoral Administration, or ..... 3 s.h.
346. Pastoral Administration ..... 3 s.h.
Major and free electives:
251. The Church and Rural Sociology ..... 3 s.h.
252. Rural Church Administration ..... 3 s.h.
255. Social Pathology ..... 3 s.h.
257. Principles of Sociology ..... 3 s.h.
342. Sermon Construction ..... 3 s.h.
343. Psychology of Preaching ..... 3 s.h.
344. History of Preaching ..... 3 s.h.
345-346. Pastoral Administration ..... 6 s.h.
348. Church Music and Religious Art ..... 3 s.h.
RELIGIOUS EDUCATION
General requirement:
261. Administration and Supervision of Religious Education ..... 3 s.h.
275. Introduction to the Psychology of Religion ..... 3 s.h.
Major and free electives:
262. Surveys, Tests, and Measurements ..... 3 s.h.
265. Curriculum of Religious Education ..... 3 s.h.
266. Religious Drama ..... 3 s.h.
267. Religious Education in the Community ..... 3 s.h.
268. Materials of Character Education ..... 3 s.h.
269. Principles and Program of Character Education ..... 3 s.h.
270. Religious Education in the Home ..... 3 s.h.
271. Research in Religious Education ..... 3 s.h.
272. Philosophy of Religious Education ..... 3 s.h.
273. Curriculum Construction ..... 3 s.h.
276. Advanced Psychology of Religion ..... 3 s.h.
371. The Religious Experience of the Child ..... 3 s.h.
372. The Religious Experience of Youth ..... 3 s.h.
373. The Psychology of Mysticism ..... $3=$ " 2 .
UISTORY OF RELIGION AND MISSIONS
General requirement:
281. The Nature and Early Development of Religion, or 3 s.h.
282. Living Religions of the World, and either 3 s.h.
283. Expansion of Christianity, or 3 s.h.
284. Principles of Missions 3 s.h.
Major and free electives:
281. The Nature and Early Development of Religion ..... 3 s.h.
282. Living Religions of the World ..... 3 s.h.
283. Expansion of Christianity ..... 3 s.h.
284. Principles of Missions ..... 3 s.h.
381. Leading Ideas of Religion (God, Sin, and Salvation) ..... 3 s.h.
382. Leading Ideas of Religion (Future Life and Ethics) ..... 3 s.h.
383. Buddhism ..... 3 s.h.
384. Mohammedanism ..... 3 s.h.
385. Christianity and World Movements ..... 3 s.h.
386. Missionary Problems ..... 3 s.h.
DISTRIBUTION OF COURSES BY YEARS
Junior Year

| Old Testament | 6 s.h. |
| :--- | :--- |
| New Testament | 6 s.h. |
| Church History | 6 s.h. |

The remaining twelve semester-hours shall be chosen from courses in Greek, Hebrew, Homiletics and Practical Theology, Religious Education, History of Religion and Missions, but not more than six semester-hours shall be taken in one department.

Middle Year
New Testament
Christian Doctrine
The remaining twenty-one semester-hours shall be chosen from courses in Greek, Hebrew, Homiletics and Practical Theology, Religious Education, History of Religion and Missions, major electives, free electives; but not more than twelve semes-ter-hours shall be taken in one department.

## Senior Year

In the Senior year the student must fulfill all general requirements not completed in the Junior and Middle years. The remainder of the work is elective.

## COURSES OF INSTRUCTION

## OLD TESTAMENT

Odd-numbered courses are offered in the first semester, even-numbered courses in the second semester.

201-202. Introductory Hebrew.-A study in the Hebrew language. The reading of the first eight chapters of Genesis inductively. 6 s.h.

Professor Godbey
203-204. Introduction to the Old Testament.-The origin, literary form, and contents of the books of the Old Testament in their historical setting. 6 s.h.

Professor Russell
301. Old Testament Theology.-The religious and ethical teachings of the books of the Old Testament in their historical development. Prerequisite, Old Testament 203-204. 3 s.h. Professor Russell
302. The Exegesis of Selected Books of the Old Testament.-The books to be studied will be chosen from the following list: Job, Second Isaiah, Zechariah, the Psalms. The study will be based on the English text. 3 s.h.

Professor Russell
305-306. Pre-Mosaic Hebrew Religion.-Its historical portrayal in the Old Testament. Prolegomena to the study of Old Testament history and literature. No knowledge of Hebrew required. 6 s.h.

Professor Godbey
307-308. The Old Testament in Hebrew.-_Parts of the Pentateuch are read during the first semester. Selections from the Prophets are the basis for the study in the second semester. 6 s.h. Professor Godbey

309-310. Ancient Oriental History.-The aim of this course is to show the relations of Minoan, Philistine, Ancient Egyptian, and Assyro-Babylonian history and literature to the Old Testament and to the early history of the Hebrews. 6 s.h.

Professor Godbey

## NEW TESTAMENT

211-212. Hellenistic Greek.-A course for students who wish to begin the study of the language of the New Testament. Selections from the New Testament will be read in the second semester. 6 s.h., provided the student takes New Testament 217-218 the following year.

Professor Branscomb
213-214. The Beginnings of Christianity.-A survey course dealing with the background, the beginnings, and the early history of Christianity. Special attention is given to the creation of the literature of the New Testament. 6 s.h. Professor Branscomb
217. The New Testament in Greek_Rapid reading in Greek text of the New Testament. Prerequisite, six semester-hours study of the Greek language. 3 s.h.

Professor Branscomb
218. The Exegesis of Selected Books of the New Testament.-The books studied will be Galatians, Colossians, and Hebrews. The course will be based on the Greek text. 3 s.h.

Professor Russell
219. Life of Paul.-A study of Paul's life on the basis of the Acts and the epistles. Consideration is given to Paul as a man, the factors entering into his character, and his permanent contribution to the world. 3 s.h.

Professor Myers
[Not offered in 1930-31]
311. The Life and Teachings of Jesus.-Prerequisite, New Testament 213-214. 3 s.h.

Professor Branscomb
312. New Testament Theology.-The teaching of the books of the New Testament in their historical development. Prerequisite, New Testament 311. 3 s.h.

Professor Russell
313. The Exegesis of Selected Books of the New Testament.-The books studied will be I Corinthians, II Timothy, I Peter, and selections from the Apocalypse of John. The study will be based on the Greek text. Prerequisite, New Testament 217, or its equivalent. 3 s.h.

Professor Russell
314. The Exegesis of Selected Books of the New Testament.-The books studied will be Romans, James, and the First Epistle of John. The study will be based on the English text. Prerequisite, New Testament 213-214, or its equivalent. 3 s.h.

Professor Branscomb
315. Judaism at the Beginning of the Christian Era.-A study of Judaism from the time of Ben Sirach to the writing of the Mishna. Prerequisite, New Testament 213-214, or its equivalent. 3 s.h.

Professor Branscomb
[Not offered in 1930-31]
316. Hellenistic Religions at the Beginning of the Christian Era.-Prerequisite, New Testament 213-214. 3 s.h. Professor Russell
[Not offered in 1930-31]

## CHRISTIAN DOCTRINE

221. The Philosophy of Conduct.-See Philosophy 203, p. 88 of the catalogue of Undergraduate Instruction. 3 s.h. Professor Cranford
222. Christian Ethics.-See Philosophy 204, p. 88 of the catalogue of Undergraduate Instruction. 3 s.h. Professor Cranford

223-224. Idealism.-See Philosophy 205-206, p. 88 of the catalogue of Undergraduate Instruction. 6 s.h. Professor Cranford
321. Introduction to the Science of Theology.-A consideration of theology as a branch of science and an indication of some of the results obtained through the use of the scientific method in theological investigation. 3 s.h.

Professor Rowe
322. The Content of Christian Doctrine.-A comprehensive survey of the leading doctrines of Christianity in the light of the religious thought and experience of the present age. 3 s.h.

Professor Rowe
323. Theology in Ancient and Medieval Christianity.-The history of Christian thought from the Greek Fathers to the Scholastics with special attention to the ecumenical creeds. 3 s.h.

Professor Rowe
324. Theology in Modern Christianity.-The history of Christian thought from the beginning of the Reformation to the present time. 3 s.h.

Professor Rowe
325. Soteriology.-A study of the Christian doctrine of salvation and a comparison of the various ways by which the saving power of God is thought to take effect in personal and social life. 3 s.h.

Professor Rowe
[Not offered in 1930-31]
326. Eschatology.-A study of "the last things" in the light of the Christian hope for the individual and for society with special emphasis upon personal immortality. 3 s.h.

Professor Rowe
[Not offered in 1930-31]

## CHURCH HISTORY

233. Church History to the Reformation.-A survey of the growth of the Christian Church from the Apostolic Age to the Reformation. 3 s.h. Professor Garber
234. History of the Evangelical Movement.-Beginning with the Lutheran Reformation, this course traces the rise, growth, influence, and history to 1800 of the Calvinistic, Anglican, Reformed, Quaker, Baptist, and Methodist movements. 3 s.h.

Professor Garber
333. The Denominations in America: the Colonial Period.-A study of the transfer of the various denominations to the English colonies, and their problems to the Revolutionary War. Prerequisite, Church History 233234. 3 s.h.

Professor Garber
334. The Denominations in America: the National Period.-Major emphasis is placed upon relations of church and state, steps toward Christian unity, the small sects, the Young People's Movement, Christian education, and modern theological issues. Prerequisite, Church History 233-234. 3 s.h.

Professor Garber
335. Methodism.-A study of the beginnings and growth of the Methodist societies in England, of early Methodism in America, and of the development of the several branches of the Methodist Church in America. Prerequisite, Church History 233-234. 3 s.h. Professor Garber
336. Great Men of the Christian Church.-A study of outstanding individuals who have in different ways influenced the thought and program of the Christian Church. The life, work, and contributions of about twenty representative Christian leaders. Prerequisite, Church History 233-234. 3 s.h.

Professor Garber
337. Protestantism and Catholicism in Europe since 1800.-A comprehensive study of the religious situation in Europe in modern times, emphasizing the papacy in the age of nationalism, relations of church and state, German theology of the nineteenth century, and the Oxford movement. Prerequisite, Church History 233-234. 3 s.h.

Professor Garber
[Not offered in 1930-31]

## HOMILETICS AND PRACTICAL THEOLOGY

251. The Church and Rural Sociology.-A study of the religious, social, educational, and economic conditions of the country; the historical development of the church in the midst of rural social relations; an attempt to discover the present obligation of the church. $\mathbf{3}$ s.h.

Professor Ormond
252. Rural Church Administration.-This course will deal with the functions of the rural church; the minister's attitude toward rural life, his mission to the rural people, as well as his service in managing the organization of and supervising the church program. 3 s.h.

Professor Ormond
255. Social Pathology.-See Sociology 205, p. 100 of the catalogue of Undergraduate Instruction. 3 s.h. Professor Ellwood
257. Principles of Sociology.-See the forthcoming catalogue of the Graduate School of Arts and Sciences. 3 s.h. Professor Ellwood
341. Homiletics.-An introduction to the theory and practice of preaching. Practical problems in preaching are investigated, to determine the causes of success and failure. Opportunity for practice preaching will be afforded. 3 s.h.

Professor Hickman
342. Sermon Construction.-A study of problems in sermon construction and points of psychological contact between the preacher and his congregation. The class work will involve a critical analysis of selected sermons, with written reports. 3 s.h. Professor Hickman
343. Psychology of Preaching.-A psychological study of the preaching motive, the relation of the preacher to his congregation, and the relation of the preacher to society in general. 3 s.h. Professor Hickman
[Not offered in 1930-31]
344. History of Preaching.-An historical study of the development of Christian preaching from the apostolic period to the present time. Emphasis is laid upon the personality and the homiletical methods of great preachers, studied in their true historical perspective. 3 s.h.

Professor Hickman
[Not offered in 1930-31]
345-346. Pastoral Administration.-A survey of the duties, relationships, and opportunities of the pastorate, and of the organization and management of a parish; the conduct of public worship; methods of dealing with problems; projects in local churches. 6 s.h.

Professor Stanbury
348. Church Music and Religious Art.-A study of the use of music and art in public worship. 3 s.h. Mr. Barnes et al.

## RELIGIOUS EDUCATION

261. Administration and Supervision of Religious Education.-Deals with problems of administering and supervising the religious education program of the local church. Designed especially to train ministers and other administrative leaders in religious education. Methods of correlation and integration are considered. 3 s.h. Mr. Litile
262. Surveys, Tests, and Measurements.-Study of the methods of getting the facts in religious education. Consideration of underlying principles, techniques, and available materials. Special attention to procedure in a local church. 3 s.h.

Professor
265. Curriculum of Religious Education.-Study of various theories of the curriculum of religious education; conception of the curriculum as enriched and controlled experience. Analysis of existing curricula and critical evaluation of same. 3 s.h. Professor Spence
[Not offered in 1930-31]
266. Religious Drama.-Study and analysis of the best religious drama available. Project work in the writing and production of religious drama and pageants. 3 s.h.

Professor Spence
[Not offered in 1930-31]
267. Religious Education in the Community.-This course considers the larger relations of religious education to public education and other community agencies, and also the need, organization, program, and types of week-day religious education and the vacation church school. 3 s.h.

Professor Spence
268. Materials of Character Education.-A study of the Bible and other great religious literature for their contributions to character formation at each given stage of character development. Special emphasis on story material and modern religious poetry. 3 s.h. Professor Spence
269. Principles and Program of Character Education.-Theory and methods of character education. Study of experiments made in this field. While primary consideration is given character building in religious education, the development of character education in the public schools will also be carefully surveyed. 3 s.h. Mr. Little
270. Religious Education in the Home.-Deals with special problems in connection with making the home an effective religious educational agency. Study of family relationships, worship habits, attitudes, and ideals. Coöperation of the home with other agencies in the moral and religious development of the child. 3 s.h.

Professor
271. Research in Religious Education.-For advanced students and especially those majoring in religious education. Offers direction in the use of various techniques and methods for both field and library investigations. (All professors in the department are available for special counsel.) 3 s.h.

Professor -_
272. Philosophy of Religious Education.-For advanced students interested in problems growing out of the philosophical implications of religious education. Critical examination of various theories and principles underlying modern procedure in religious education. Prerequisite, Religious Education 261. 3. s.h.

Professor
273. Curriculum Construction.-This course deals with the processes of research, construction, and experimentation used in curriculum making. Actual curriculum construction will be undertaken. 3 s.h.

Professor Spence
[Not offered in 1930-31]
275. Introduction to the Psychology of Religion.-Study of the major factors of religious experience, together with conditions bearing upon its genesis and growth. 3 s.h. Professor Hickman
276. Advanced Psychology of Religion.-Psychological study of such problems as worship, prayer, and various types of belief. Some attention to special problems. Prerequisite, Religious Education 275 or its equivalent. 3 s.h. Professor Hickman
371. The Religious Experience of the Child.-A psychological study of the developing religious experience of childhood, involving a consideration of the principles of genetic psychology. Prerequisite, one course in general psychology. 3 s.h.

Professor Hickman
372. The Religious Experience of Youth.-A continuation of Religious Education 371. Prerequisite, one course in general psychology. 3 s.h.

Professor Hickman
373. The Psychology of Mysticism.-A brief historical review of the principal phases of mysticism in religion, followed by a psychological analysis to estimate the abiding worth of mysticism in religious experience. Prerequisite, Religious Education 275 or equivalent. 3 s.h.

Professor Hickman
[Not offered in 1930-31]

## HISTORY OF RELIGION AND MISSIONS

281. The Nature and Early Development of Religion.-Introduction to the early history of religion, the beliefs and practices of the more primitive peoples, and the religious life of the ancient world. 3 s.h.

Professor Cannon
282. Living Religions of the World.-A survey of the religious systems of India, China, and Japan, followed by a study of Judaism, Mohammedanism, and Christianity, the object being to trace the historical development of each religion. 3 s.h.

Professor Cannon
283. Expansion of Christianity.-Apostolic missions, conquest of the Roman Empire, winning of northern Europe, the modern missionary era, status of missionary work in important areas, social aspects of missions, missionary biography. 3 s.h. Professor Cannon
284. Principles of Missions.-The great missionary agencies, their foundation and growth; creation and cultivation of the missionary spirit at the home base; training and work of the pastor; principles and practice of missionary education; organization of the local congregation for its missionary tasks. 3 s.h.

Professor Cannon
381. Leading Ideas of Religion.-The idea of God and the doctrine of $\sin$ and salvation in the religions of the world. Prerequisite, History of Religion and Missions 281 or 282. 3 s.h.

Professor Cannon
382. Leading Ideas of Religion.-The conception of the future life and ethical ideals and practice in the religions of the world. Prerequisite, History of Religion and Missions 281 or 282. 3 s.h.

Professor Cannon
383. Buddhism.-India at the rise of Buddhism. Life of the Buddha and the teachings of early Buddhism. Development into the Hinayana and Mahayana schools, its spread and present condition in southern and eastern Asia. Prerequisite, History of Religion and Missions 282. 3 s.h.

Professor Cannon
[Not offered in 1930-31]
384. Mohammedanism.-The life of Mohammed and the religion of lslam, special attention being given to the Koran and its teaching. The aim is to interpret Mohammedanism as a force today. Prerequisite, History of Religion and Missions 282. 3 s.h.
[Not offered in 1930-31]
385. Christianity and World Movements.-Relation of Christianity to significant world movements,-race, war, industry, world peace. 3 s.h. Professor Cannon
[Not offered in 1930-31]
386. Missionary Problems.-Needs of particular fields, types of work, relations of older and younger churches, nationalist movements, qualification and training of candidates, education and other selected problems. Prerequisite. History of Religion and Missions 283 or 284. 3 s.h.

Professor Cannon
[Not offered in 1930-31]

## GENERAL INFORMATION

## REGULATIONS FOR THE DEGREE OF MASTER OF ARTS IN RELIGION

By joint action of the Graduate Council and of the faculty of the School of Religion, the following regulations have been established for the granting of the degree of Master of Arts in the field of religion:

A student desiring to obtain an A.M. degree with religion as the principal field of work must first complete a period of one academic year in residence in the School of Religion, or in an approved school of similar standing, and must secure thirty semester-hours of credit in studies approved by the faculty of the School of Religion. He may then be recommended to the Graduate Council by the faculty of the School of Religion as a suitable candidate for the A.M. degree. Only those students who have maintained a creditable standing in the first year's work of the School of Religion will be recommended for admission to candidacy for the A.M. degree.

The student, in the next year following the completion of the preliminary requirement in the School of Religion, shall take twelve se-mester-hours of work and write a thesis for the A.M. degree in some department of the School of Religion in which he has previously received six semester-hours credit for resident work.* In addition, the student shall take twelve semester-hours of work in related departments of the School of Religion, or in related departments offering graduate courses in the other schools of the University. The student's selection of courses shall be approved by the Faculty of the School of Religion and by the Graduate Council.

In all other respects the candidate for the A.M. degree in the field of Religion shall conform to the usual regulations of the Graduate Council, such as the approval by the Graduate Council of all courses in the School of Religion for which graduate credit is asked, the prerequisites in foreign language, the examination of the thesis, etc.

Students who are recommended to the Graduate Council by the faculty of the School of Religion as candidates for the A.M. degree under the above plan shall be registered for the following year in the Graduate School of the University. They may also be registered in duplicate in the School of Religion for such part of the year's work as will be accepted by the faculty of the School of Religion toward the degree of Bachelor of Divinity.

[^28]
## FEES

Room-rent and tuition are remitted to students matriculated in the School of Religion, for which they are expected to render service from time to time which shall not interfere with their work in the School of Religion.

Each student is assessed per semester as follows:

$$
\begin{aligned}
& \text { Matriculation fee ................................. } \$ 25.00 \\
& \text { Athletic fee (optional) ........................ } 5.00 \\
& \text { Publication fee (optional) .................... } 2.50 \\
& \text { Damage fee .................................... } 1.00
\end{aligned}
$$

Each student is assessed in the last semester before a degree is conferred, a commencement fee of three dollars and a diploma fee of five dollars. The latter fee is refunded if the diploma is not awarded.

## LATE REGISTRATION

Students matriculating in either semester at a date later than that prescribed in the catalogue shall pay to the treasurer of the University a penalty of five dollars.

## ROOMS

Men students in the School of Religion are housed in the new dormitories on the west campus of Duke University. All rooms are provided with heat, water, and electric light. Each student furnishes his own blankets, sheets, pillow-slips, towels, and pillows. Students must furnish their own electric lamps, which can be purchased from the University store.

Rooms for a given year may be engaged at the treasurer's office at any time before May 15 of the preceding year. Every student who wishes to retain his room for the succeeding year must notify the treasurer's office on or before May 15. All rooms which have not been signed for on or before May 15 will be considered vacant for the succeeding year. A reservation is canceled, and the University is free to rent the room to other students, unless a deposit of $\$ 5.00$ for each proposed occupant, in part payment of the rent, is made by August 1. When a room is once engaged by a student, no change will be permitted except with the consent of the treasurer.

## BOARDING HALLS

The University dining hall in the College Union has accommodations for all the resident men students. It is the policy of the University to furnish board to the students at actual cost. Board may be secured at the Union for $\$ 25.00$ per month of twenty-eight days. The College Union is the logical center of student activities and all male students are advised to board in its supervised halls.

## STUDENT AID

Scholarships are available for ministerial students, the terms of which may be ascertained by correspondence with the Registrar of the School of Religion. Aid is also given in securing positions in churches. Students who need financial help may be assured that the administration will do all in its power to give the necessary assistance.

## LIBRARY

The library of Duke University is at the disposal of students of the School of Religion. This library contains many volumes of great value for the work of the School of Religion. Additions are being made constantly. Beginning with the academic year 1930-31 the School of Religion will be housed on the west campus in its new building which will contain a special library and reading room. This building is located next to the University library, thus offering quick access to what will become in time one of the great university libraries in America.

Recently two private libraries of note have been secured. One is the library of the late Dr. Graf von Baudissin, Professor of the Old Testament in Berlin University. The other is that of the late Dr. Karl Holl, Professor of Church History in the same university. These libraries, consisting of over five thousand volumes, are the fruit of long years of literary interest and activity on the part of these learned men.

## RELIGIOUS LIFE

The students of the School of Religion are expected to attend the regular Trinity College chapel services the first five days of the week. A special chapel service for the School of Religion is held each Saturday morning.

In this, as in other features of the University life, the students of the School of Religion are urged to identify themselves with the life of the whole student group.

## DATE OF REGISTRATION

Class work in the School of Religion for the academic session of 1930-1931 will begin Monday, September 29, 1930. The registration of students in the School of Religion will begin on Friday, September 26, 1930. Registration should be completed by Saturday, September 27, 1930.

## ADDITIONAL INFORMATION

Requests for information not contained in this catalogue should be addressed to the Registrar of the School of Religion, Duke University, Durham, North Carolina.

# JUNALUSKA SCHOOL OF RELIGION 

INSTRUCTORS<br>ELBERT RUSSELL, A.B., A.M., Ph.D.<br>Dean of the School of Religion and Professor of Biblical Interpretation Duke University<br>WILLIAM CLAYTON BOWER, A.M.<br>Professor of Religious Education<br>The University of Chicago<br>BENNETT HARVIE BRANSCOMB, A.B., B.A., M.A. (Oxon)<br>Professor of New Testament<br>Duke University<br>SYLVANUS MILNE DUVALL, A.B., Ph.D.<br>Professor of Religious Education<br>Scarritt College<br>FRANKLIN SIMPSON HICKMAN, A.B., A.M., S.T.B., Ph.D.<br>Professor of the Psychology of Religion and Homiletics<br>Duke University<br>SAMUEL GUY INMAN, A.B., A.M., LL.D.,<br>Executive Secretary, Committee on Coöperation in Latin America New York<br>GILBERT THEODORE ROWE, A.B., D.D., Litt.D.<br>Professor of Christian Doctrine<br>Duke University<br>\section*{CALENDAR: SCOPE OF WORK}

The third session of the Junaluska School of Religion will be held at Lake Junaluska, North Carolina, from July 21 to August 30, 1930. It will be conducted under the joint management of Duke University and the General Sunday School Board with the coöperation of the Board of Missions and other boards of the Church. The purpose is to conduct a summer
school of religion which shall meet the growing demand for advanced study in the Bible, Theology, Religious Education, Missions, and allied subjects.

There will be two classes of students, those who are graduates of high schools and who may have had one or more years in college, and those who are graduates of colleges. The school is open to men and women. The credits secured for work done will be Duke University credits, and will count toward the A.B. and B.D. degrees and for the A.M. degree in the School of Religion.

The School is designed for pastors, church workers, missionaries, and students who desire to fit themselves the better for their work or to add credits looking toward the securing of university degrees.

## COURSES

Courses will be offered meeting five times a week with eighty-minute periods. Each course, satisfactorily completed, will receive a credit of three semester-hours in Duke University. Two such courses may be taken by each student. The courses offered are divided into two groups. The first group consists of courses for college undergraduates who are graduates of high schools and who desire credits looking toward the A.B. degree. The second group consists of courses for college graduates who desire credits looking toward the B.D. degree. These courses may also be taken by college undergraduates who have completed the junior year and are ranked as incoming seniors in college.

## GROUP I

FOR COLLEGE UNDERGRADUATES
Course 1. The Teachings of Jesus.-A study of Jesus' teaching in the light of the religious and ethical ideas of his day.

Professor Branscomb
Course 3. Old Testament History.-A survey of the history of the Hebrews in its relation to contemporary oriental history, with special emphasis on the literature and religious institutions. Professor Russetr

Course 5. The Evangelical Movement as a Factor in Social Reconstruction in Latin America.-Survey of present social and religious conditions, the church and the community, religious education program, literature problem, relations between national and foreign workers and between Protestants and Catholics, movements for coöperation and unity.

Professor Inman

## GROUP II

> FOR COLLEGE GRADUATES
> (AND FOR COLLEGE SENIORS)

Course 2. The Religious Ideas of Paul.-Religious and ethical teachings of the Apostle Paul and their significance for the life of today. Special attention is given to the religious and philosophic movements of Paul's day.

Professor Branscomb
Course 4. The Social Teachings of the Old Testament.-A survey of the social teachings of the Old Testament, with special reference to their value in modern life.

Professor Russell
Course 6. Religious Education in the Modern Church.-The educational function of the church; the objectives of religious education; the church organized for religious education; an adequate leadership; the content and method of religious education; religious education through social participation ; the scientific method in religious education; religious education in its relationship to the total educational process; religious education and public education; religious education as a creative process.

Professor Bower
Course 8. Practicum in Religious Education.-The analysis of problems in teaching religion. The course will be based upon the practical experience of the members of the group in the actual conduct of religious education. The process as conducted will be analyzed and criticized. Changes in the direction of improvement will be projected in terms of practical steps to be undertaken. Each student is expected to undertake a specific project.

Professor Bower
Course 10. Educational Psychology.-Consideration will be given to the psychological basis of conduct; the nature of motive; the nature and laws of learning and especially to those phases of psychology which are of greatest significance for character formation and spiritual growth.

Professor Duvall
Course 12. Introduction to the Science of Theology.-A consideration of theology as a branch of science and an indication of some of the results obtained through the use of the scientific method in theological investigation.

Professor Rowe
Course 14. Introduction to the Psychology of Religion.-Study of the major factors of religious experience, together with the conditions bearing upon its genesis and growth.

Professor Hickman
Course 16. Sermon Construction.-A study of problems in sermon construction and points of psychological contact between the preacher and his congregation. The class work will involve a critical analysis of selected sermons with written reports.

Professor Hickman

Course 18. Christianity and World Movements.-A survey of present world movements building a better world: international political organization, including the League of Nations, World Court, Pan American Union, international law, arbitration; international social, labor, health and student movements; international missionary program, recent conferences at Jerusalem and Havana, relations between younger and older churches, opportunities for foreign service. Professor Inman

## ADDITIONAL INFORMATION

A general matriculation fee of $\$ 5.00$ is due at time of registration and a special fee of $\$ 5.00$ in each course for which the student registers.

Students are of course responsible for their own arrangements for board and room. Those desiring to engage room and board in the Sunday School Dormitory should write A. L. Dietrich, 810 Broadway, Nashville, Tennessee. Those desiring to room elsewhere should write to Ralph E. Nollner, Lake Junaluska, North Carolina.

All the sessions of the school will be held in the Sunday School Building at the west end of Lake Junaluska.

Academic matters will be in charge of the faculty of the School of Religion, Elbert Russell, Dean.

Those desiring further information concerning courses and conditions of work should address John Q. Schisler, General Sunday School Board, 810 Broadway, Nashville, Tennessee, or Paul N. Garber, Registrar, School of Religion, Duke University, Durham, North Carolina.

## ROLL OF STUDENTS, SCHOOL OF RELIGION

## SENIOR CLASS

Acey, Archie Everette
A.B., Randolph-Macon College, 1927.

Barclift, Chancie DeShield
A.B., Duke University, 1927.

Branton, Razzie Ray
A.B., Millsaps College, 1927.

Caudill, Russell Horton
A.B., Duke University, 1927.

Crutchfield, Henry Ervin
A.B., Elon College, 1926.

Cunningham, Marcus Earl
A.B., University of Arkansas, 1927.
A.M., Duke University, 1929.

Davis, Harvey Laudis
A.B., Duke University, 1921.

Dawson, Robert Grady
A.B., Duke University, 1927.

Edwards, Earl Bowling
A.B., Duke University, 1928.

Funk, Sherwood William
A.B., Morris Harvey College, 1925.

Gist, Joseph Andrew
A.B., East Central State Teachers College, 1927.

Green, Charles Sylvester
Durham, N. C.
A.B., Wake Forest College, 1922.
A.M., Duke University, 1924.

Guice, John Asa
A.B., Hendrix College, 1927.

Holler, Adlai Cornwell
A.B., Wofford College, 1921.

LL.B., University of South Carolina, 1925.
House, Robert Lee
A.B., Duke University, 1928.

Johnson, Hugh Hanna
Chatham, Va.
Durant's Neck, N. C.
Hathorn, Miss.
Durham, N. C.
Henderson, N. C.
Fayetteville, Ark.
Durham, N. C.
Greensboro, N. C.
Durliam, N. C.
Charleston, W. Va.
Winnsboro, Tex.

Conway, Ark.
Rock Hill, S. C.

Franklinton, N. C.
Zuni, Va.
A.B., The College of William and Mary, 1924.

Jones, Alvin Adelbert
A.B., Allegheny College, 1927.

Keever, Homer Maxwell
A.B., Duke University, 1923.

Lawrence, Marquis Wood
A.B., Duke University, 1925.

McCastlain, Morris Sheppard
Ph.B., Emory University, 1927.
McLarty, James Brown
A.B., Duke University, 1927.

Nelson, Fletcher
A.B., Hendrix College, 1927.

Rainey, Lawyer James
A.B., Duke University, 1926.

Rowe, Doyle Thomas
A.B., University of Arkansas, 1927.

Russell, Leon
A.B., Hendrix College, 1927.

Shell, William Frank
A.B., Hendrix College, 1926.

Terrell, James Milas
A.B., Emory and Henry College, 1894.
B.D., Vanderbilt University, 1897.

Thompson, Lacy Hunter
A.B., Asbury College, 1927.

Thornburg, J. Lewis
A.B., Lenoir-Rhyne College, 1920.

Waggoner, Albert Crews
A.B., Duke University, 1927.

Whitford, William Edward
A.B., Duke University, 1927.

Womack, Carlos Poynor
A.B., University of Arkansas, 1927.

West Helena, Ark.
Rosston, Ark.
Durham, N. C.
Haw River, N. C.
Durham, N. C.
Walkertown, N. C.
Vanceboro, N. C.
Rogers, Ark.

## MIDDLE CLASS

Allen, Robert James
B.S., Citadel, 1925.

Ashley, George Norman
A.B., Wake Forest College, 1928.
*Averitt, Vernon Geddie
A.B., Southern College, 1930

Baker, Cecil Alexander
A.B., Lambuth College, 1928.

Barnhart, Frank Melton
A.B., Emory and Henry College, 1926.

Bowles, Charles Phillips
A. B., Duke University, 1928.

Brown, Adrian Ernul
A.B., Duke University 1916.

Brown, Robert Edgar
A.B., Southwestern University, 1920.

Bruton, Robert Bradley
A.B., Duke University, 1929.

Carroll, James Elwood
A.B., High Point College, 1928.

Chalfant, Vernon Elmer
A.B., Millsaps College, 1926.

Clark, Helen Dearmin
A.B., Randolph-Macon Woman's College, 1928.

Clegg, William Lemuel
A.B., Duke University, 1924.

Coleman, Thomas Rupert
A.B., Duke University, 1928.

Cutter, Walter Airey
A.B., Central College, 1928.

Grigg, Womble Quoy
A.B., Duke University, 1923.

Harris, Loy Vernon
A.B., Duke University, 1924.

Highfill, Thomas Guthrie
Greeleyville, S. C.
Edenton, N. C.
Groveland, Fla.
Jackson, Tenn.
Crimora, Va.
Guilford College, N. C.
Bynum, N. C.
Durham, N. C.
Candor, N. C.
Reidsville, N. C.
Augusta, Ark.
High Point, N. C.
Garner, N. C.
Durham, N. C.
Baltimore, Md.
Lawndale, N. C.
Elon College, N. C.
Donnoha, N. C.
A.B., Moravian College, 1928.

* The degree of Bachelor of Arts will be conferred in June, 1930.

Hunt, Dwight R. Vinita, Okla.
A.B., Southeastern State Teachers College, 1928.

Jordan, Frank Booe
A.B., Duke University, 1927.

Kale, William Arthur
A.B., Duke University, 1925.

Kincheloe, Marvin Smith
A.B., Emory and Henry College, 1925.

Knight, John Vincent
A.B., Elon College, 1915.

Mayo, Louis Allen
A.B., Duke University, 1928.

Minga, Taylor Herbert
A.B., Birmingham-Southern College, 1928.

Murphy, Hugh Edwin
A.B., George Washington University, 1928.

O'Kelly, Walter Vernon
A.B., McMurry College, 1926.

Rowland, John Lester
A.B., Hendrix College. 1926.

Sessoms, Louise Elizabeth
A.B., Duke University, 1926.

Shuller, Edgar Ralph
A.B., Hendrix College, 1925.

Shumaker, Ralph Baxter
A.B., Duke University, 1928.

Tilley, Lester Archie
A.B., Duke University, 1929.

Walton, Aubrey Grey
A.B., Hendrix College, 1928.

Wilkinson, Jesse Giles
A.B., Duke University, 1927.

Yountz, James Ernest
A.B., Duke University, 1929.

Salisbury, N. C.
West Asheville, N. C.
Church Hill, Tenn.
Durham, N. C.
Durham, N. C.
Nettleton, Miss.
Durham, N. C.
Abilene, Tex.
Harrison, Ark.
Fuquay Springs, N. C.
Ozark, Ark.
Salisbury, N. C.
Hurdle Mills, N. C.
Helena, Ark.
Sherrill's Ford, N. C.
Southmont, N. C.

## JUNIOR CLASS

*Andrews, Chester James Fairmont, N. C.
A.B., Duke University, 1930.

Atkinson, Samuel Marvin
A.B., Wofford College, 1929.

Austin, Hugh Stewart
A.B., University of Florida, 1929.

Barbee, Carl Webster
B.S., Wake Forest College, 1927.

Barnwell, Roy James
A.B., Duke University, 1929.

Barringer, Emma Blanche
A.B., Duke University, 1922.
*Boone, Daniel Clifton
A.B., Elon College, 1930.

Braxton, Jabus Walter
A.B., High Point College, 1929.

Brown, Cansau Delane
A.B., Duke University, 1929.

Carper, John Howard
A.B., Duke University, 1929.

Mullins, S. C.
Orlando, Fla.
Seven Springs, N. C.
Hendersonville, N. C.
Norwood, N. C.
Suffolk, Va.
Snow Camp, N. C.
Traphill, N. C.
Rowland, N. C.

[^29]Carruth, John Robert
A.B., Emory and Henry College, 1929.

Clay, Charles Wesley
A.B., Duke University, 1929.

Cooke, Paul
A.B., Birmingham-Southern College, 1926.

Council, Raymond Ward
A.B., Lambuth College, 1929.

Dimmette, Joel Walter
A.B., Duke University, 1928.

Edens, Lacy Thomas
A.B., Duke University, 1924.

Edwards, Moir Williamson
A.B., Duke University, 1929.

Erwin, McKinley Gladstone
A.B., Duke University, 1923.

Fields, Paul Henry
A.B., Duke University, 1927.

George, LeRoy Brunson
A.B., Wofford College, 1929.

Greenwood, Lawrence Henry
A.B., Emory and Henry College, 1929.

Grisham, Roy Arnold
A.B., Millsaps College, 1928.

Harbin, Andrew Vandiver, Jr.
A.B., Wofford College, 1929.

Hardin, Harvey McConnell
A.B., Southern College, 1929.
*Hathaway, Offie Lemuel
A.B., Duke University, 1930.

Hillman, Carden Adams
A.B., Emory and Henry College, 1924.

Hood, George Franklin
A.B., Duke University, 1928.

Hunt, Ruth Eberly
A.B., Southeastern State Teachers College, 1929.

Larkin, Leon Crawford
A.B., Duke University, 1917.

Nalls, Frank Russell, Jr.
A.B., Mercer University, 1923.

Pegg, Jabez Paul
A.B., University of North Carolina, 1926.

Rainey, Irene Hurst
A.B., Duke University, 1926.

Sanford, Marshall Stanfield
A.B., Lambuth College, 1929.

Shankle, Byron
A.B., Duke University, 1923.

Sharp, Eron Malcolm
A.B., Millsaps College, 1927.

Sharpe, Ralph McDuffie
A.B., Wofford College, 1927.

Singleton, George Harbin, Jr.
A.B., Birmingham-Southern College, 1929.

Stafford, George Reid
A.B., Emory and Henry College, 1925.

El Paso, Tex.
Winston-Salem, N. C.
Cullman, Ala.
Union City, Tenn.
Graham, N. C.
Durham, N. C.
Guilford College, N. C.
Cedar Falls, N. C.
Raleigh, N. C.
Independence, La.
Roanoke, Va.
Wheeler, Miss.
Mullins, S. C.
Lakeland, Fla.
Middlesex, N. C.
Bristol, Tenn.
Vale, N. C.
Farris, Okla.
Durham, N. C.
Monroe, N. C.
Stokesdale, N. C.
Durham, N. C.
Elbridge, Tenn.
Durham, N. C.
Vernon, Tex.
Gilbert, S. C.
Birmingham, Ala.
Abingdon, Va.

[^30]Thompson, Arnold Chester
A.B., Taylor University, 1924.
*Varner, Robert Milton
A.B., Duke University, 1930.

Williams, Atticus Morris
B.S., North Carolina State College, 1921.

Williamowsky, Chaim
A.B., Jewish Rabbinical Seminary.

Williams, Benjamin Truman
A.B., Hendrix College, 1928.

Wilson, Raymond
A.B., Lambuth College, 1929.

Wolverton, Wallace Irving
A.B., Park College, 1926.

Hillsboro, N. C.
Thomasville, N. C.
Erwin, N. C.
Durham, N. C.
Ozark, Ark.
Kerrville, Tenn.
Bristow, Okla.

## JUNALUSKA SCHOOL OF RELIGION

Alexander, William Marvin
A.B., Central College, 1906.

Deans, Nettie Allen
A.B., North Carolina College for Women, 1895.

Edens, Lacy Thomas
A.B., Duke University, 1924.

Edwards, Earl Bowling
A.B., Duke University, 1928.

Edwards, James Smiley
A.B., Wofford College, 1917.

Ferguson, Mary P.
Giles, William Howard
A.B., Wofford College, 1917.
B.D., Emory University, 1918.

Gist, Joseph Andrew
A.B., East Central State Teachers College, 1927.

Henry, Freddie Elizabeth
A.B., Columbia College, 1922.
M.A., Northwestern University, 1925.

Holler. Martha Miller
A.B., Winthrop College, 1926.

Jenkins, Theodore Roosevelt
A.B., Duke University, 1927.

Kale, William Arthur
A.B., Duke University, 1929.

Kent, Juanita Ray
Kilgore, J. B.
A.B., Newberry College, 1900.

Kincheloe, Marvin Smith
A.B., Emory and Henry College, 1925.

Kirk, Edward Love
A.B., Emory and Henry College.

Lander, Carrie Parchen
A.B., Lander College, 1908.

Lewis, Frank Eugene
A.B., Bethel College, 1883.
A.M., Bethel College, 1887.

Liddell, Lola Elizabeth
A.B., Wesleyan College, 1915.

Fayette, Mo.
Charlotte, N. C.
Waynesville, N. C.
Durham, N. C.
Greenville, S. C.
Nashville, Tenn.
New Orleans, La.

Stem, N. C.
Nashville, Tenn.

Rock Hill, S. C.
Durham, N. C.
West Asheville, N. C.
Waxahachie, Tex.
Pickens, S. C.
Farmer, N. C.
High Point, N. C.
Pelzer, S. C.
Louisville, Ky.
Atlanta, Ga.

[^31]Mann, Sue Belle
A.B., Texas Woman's College, 1922.
A.M., Southern Methodist University, 1925.

McDonald, Elizabeth Jane
A.B., University of South Carolina, 1908.
A.M., University of South Carolina, 1926.

McRae, Fay
A.B., Galloway College, 1901.

Neill, Eleanor Byers
A.B., Galloway College, 1897.
B.S., George Peabody College, 1916.
A.M., George Peabody College, 1920.

Nesbitt, Charles Franklin
A.B., Wofford College, 1922.
B.D., Emory University, 1926.

Nevitt, Robert Kern
Randolph-Macon College.
Patten, Walter
A.B., Wesleyan University, 1907.
A.M., University of North Carolina, 1916.

Powell, Paul Shell
A.B., Vanderbilt University, 1910.
A.M., Vanderbilt University, 1913.
B.D., Vanderbilt University, 1913.

Rhinehart, David Horace
Rice, Percy Gordon
A.B., Birmingham-Southern College, 1925.

Sanford, Glenn F.
A.B., Hendrix College, 1924.

Seissinger, Valdora Joyce
A.B., Lambuth College, 1927.

Sigmon, Paul C.
A.B., Lenoir-Rhyne College, 1918.
A.M., University of South Carolina, 1921.
B.D., Lutheran Southern Seminary, 1921.

Spratt, Barnett
Winthrop College.
Van Hooser, Ruby Merritt
A.B., Athens College, 1913.

Winn, Annie Maria
A.B., Wesleyan College, 1891.

Wolverton, Wallace Irving
A.B., Park College, 1926.

Handley, Tex.
Columbia, S. C.
Little Rock, Ark.
Batesville, Ark.

Jackson, Miss.
Washington, D. C.
New Bern, N. C.
Hopkinsville, Ky.

Cliffside, N. C.
Albertville, Ala.
Conway, Ark.
Memphis, Tenn.
Granite Falls, N. C.

Chester, S. C.
Orlando, Fla.
Savannah, Ga.
Bristow, Okla.

## BULLETIN

 OF Duke University
## SCHOOL OF LAW



1930-1931

PUBLISHED BY DUKE UNIVERSITY
IN JANUARY, FEBRUARY, MARCH, APRIL, MAY, JUNE AND OCTOBER
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# BULLETIN <br> OF <br> Duke University 

SCHOOL OF LAW



1930-1931


## THE SCHOOL OF LAW

## FACULTY AND INSTRUCTORS

## WILLIAM PRESTON FEW

President
A.B., A.MI., Ph.D., LL..D.

JUSTIN MIILLER
Dean and Professor of Law A.B., LL.D., J.D.

William bryan bolich
Professor of Laze
A.b., BA.., M.A., B.c.l.

JOHN S. BRADWAY
Professor of Law
A.B., LL.B.

THADDEUS DILLIARD BRYSON
Profcssor of Law
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A.B., J.D.

## THE SCHOOL OF LAW

## FOUNDATION

The School of Law was founded in the summer of 1904 upon an endowment established by Messrs. James B. Duke and Benjamin N. Duke. It aims to prepare students for the profession of the law in the several states; to awaken in students of law faith in and an admiration for the profession; to develop in them a lively sense of honor and justice, and to fit them in moral character for the duties which belong to this ancient and noble profession.

## LAW SCHOOL BUILDING

The building especially designed to house the Duke University School of Law will be occupied for the first time in September, 1930.

The Law Building, like all other structures on the main campus of Duke University, is in Tudor Gothic style of colorful Cambrian stone from the Duke University quarries.

This building is planned to take care of all the various activities of the modern school of law, and in it are to be found five large classrooms with a seating capacity of approximately two hundred each, five classrooms with a seating capacity varying from fifty to seventy-five each, seminar rooms, law-club rooms, offices for the staff, quarters for a legal clinic and for special research, a court-room equipped for both supreme and superior court sessions, two large library readingrooms, and extensive stack-room space; since the stack-rooms of this building are directly connected with the central Library of the University, there is therefore a possibility of indefinite expansion to take care of an unlimited number of volumes in the library of the School of Law.

## CALENDAR

The academic year will begin Wednesday. September 24. 1930, and will end on June 10, 1931. There will be a recess from December 22, 1930, to January 3, 1931. The lectures will
begin on the opening day of the year, Wednesday, September 24, 1930.

## ADMISSION OF STUDENTS

No student will be admitted to the study of law who has not completed, with class standing satisfactory to the faculty, work equivalent to one-half of that acceptable for a bachelor's degree in the undergraduate department of Duke University, or of some other college or university of approved standing. Such work must have been completed with an average grade of not less than five per cent ligher than the passing grade of the institution from which credits are offered, or a "C" average if the applicant presents credits from an institution recognizing "D" as a passing grade.

Commencing with the academic year 1931-32 the minimum requirement for admission will be the completion of work equivalent to three-fourths of that acceptable for a bachelor's degree in the undergraduate department of Duke University. or of some other college or university of approved standing.

Any person, who has prior to the commencement of his law study complied with the requirements of the preceding paragraphs, who shall present evidence of the satisfactory completion of any part of the curriculum of the law school at any approved law school maintaining courses of instruction of at least thirty-two weeks for each academic year, and who is eligible for readmission to the law school from which he proposes to transfer, may be admitted to advanced standing and given provisional credit for courses so completed, final credit for such work to be conditioned on the satisfactory completion of courses carried in the Duke University School of Law.

Wherever possible a personal interview is required of the applicant by a representative of the University. In all cases where a personal interview is not practicable letters from public officials, school officials, or other responsible persons, certifying to the applicant's moral character, capacity for leadership, and probable success in the practice of law, are required.

Each applicant for regular or advanced standing is required to accompany his application with a recently made personal photograph, and to have submitted from the recording official of the institution from which he offers credits a complete transcript of his record and a statement of honorable dismissal.

## DEGREE

The successful completion of three years' study of law, at least one year of which must have been in residence at Duke University, together with the favorable recommendation of the faculty, is required for the degree of Bachelor of Laws.

## FEES AND EXPENSES

Tuition and registration fees are due at the beginning of each semester. The tuition fee is $\$ 75.00$ a semester. The matriculation fee is $\$ 25.00$ a semester. A damage fee of $\$ 1.00$ a year is collected at the beginning of the first semester and a medical fee of $\$ 2.00$ per semester at the begiming of each semester. The library and the athletic fees are $\$ 5.00$ each per semester. The graduation fee, payable by all students to whom a degree is awarded, is $\$ 10.00$. All fees are payable to the treasurer of the University.

Board can be secured at $\$ 25.00$ per month at the Union. Furnished rooms may be secured in the dormitories of the University at from $\$ 50.00$ to $\$ 75.00$ per semester. These prices include light, heat, water, and janitor service.

## MATRICULATION, REGISTRATION, AND ENROLLMENT

All students must appear before the Committee on Admission and obtain cards for admission or examination. Cards of admission must be presented at the treasurer's office at the time of matriculation. All students, both old and new, are required to matriculate at the beginning of each semester and to obtain from the treasurer a certificate of matriculation which serves also as an enrollment card. Students matriculating in either semester at a date later than that prescribed in this catalogue shall pay to the treasurer a penalty of five dollars for late registration. Students whose course-cards have been approved in the spring are given an opportunity during the summer to matriculate by mail for the first semester in the fall. No student is admitted to any class without a matriculation card.

## PRIVILEGES

Students are entitled, by virtue of having paid the athletic fee, to the use of the gymnasium, temnis courts, swimming pool,
and similar privileges of the University without additional costs or fees, together with free admission to all athletic contests held on home grounds.

## CONDUCT OF STUDENTS

The University expects of its students loyal and hearty cooperation in developing and maintaining high standards of conduct as well as of scholarship. The University therefore reserves the right, and matriculation by the student is a concession of this right, to ask the withdrawal of any student whose conduct at any time is not satisfactory to the University, even though no specific charge be made against the student.

## OUTLINE OF WORK

The full course of law occupies three academic years. The program of study comprises the following subjects:

## FIRST I'EAR'S WORK

1. Contracts.-A study of the principles of contracts, including the following: Requisitcs of contracts; offer, acceptance, and revocations; contracts under seal ; history and effect of Statute of Frauds; consideration; capacity of parties; legality of object; the effect of fraud and mistake. Three hours a week each semester.

Bolich
2. Property I.-The distinction between real and personal property; consideration of special kinds of chattels, personal and chattels real; origin of title, original acquisition, accession, occupancy, creation and transfer by operation of law, by act of parties, including gifts, inter vivos, causa mortis, conditional.

Introduction to the law of real property, principles of the feudal system, development of real property law as affected by custom, statutes, judicial construction, influence of equity, and modern legislation; estates in real property. Three hours a week each semester. KIRKwoon
3. Torts.-Torts distinguished from other wrongs; proximate cause; parties responsible; joint wrong doers; wrongs affecting personal property; defamation; injuries to family rights; action for wrongful death; wrongs in respect to civil and political rights; trespass; water; conversion; injuries to incorporeal rights; violations of official duty; deceit; master and servant; nuisances; non-performance of conventional and statutory duties; negligence. Three hours a week each semester.

MagGs
4. Criminal Law.--The nature and classification of crimes; the mental element in crimes; persons capable of committing crime and exemption from responsibility; sufficiency of the act; specific offenses. Two hours a week each semester.

Miller
5. Agency.-Nature of the relation; who may be (a) principal, (b) agent; rights and liabilities of principal and agent; ratification and estoppel; undisclosed principals, termination of the relation; nature and extent of the authority and of its construction and execution; special classes of agents. Two hours a week sccond semester. Horack
6. Common Law Courts and Actions.-The origin and development of the common law courts and the formulary system of actions together with a detailed study, by the case method, of the various common law actions and the principles of common law pleading. Two hours a week first semester.
7. Legal Ethics.-The study of legal ethies is confined to a consideration of adjudicated eases, the canons of ethics of both the American Bar Association and the Boston Bar Association, together with decisions by committees of lawyers of different bar associations throughout the United States, and the observations of moralists. One hour a week second semester.

Bryson
8. Legal Bibliography.-The history and devclopment of reporting of cases in England and Ameriea. Codes, statutes, and scssion laws; the use of tables of cases, parallel citation tables; arrangement of books in a law library. One hour a week first semester.

Bolich
9. Researching and Briefing.-The analysis of eases; use of digests, encyelopedias, seleeted eases; indexes to reports and Law Reviews. Trial and appellate court briefs. One hour a week second semcster.

Bolich
SECOND YEAR'S WORK
10. Equity.-Development and nature of equity jurisdiction; principles governing the exereise of equitable powers; specific performance, reformation, and rescission of contracts; benefits conferred under agreements whieh have been wholly or partially performed, and under compulsion and undue influcnee; benefits obtained by the wrongful use of another's property. Three hours a week each semester. Horack
11. Evidence.-Cireumstantial, testimonial, and real cvidence; rules as to number of kinds of witnesses; authentication and production of documents; the hearsay rules; rules of exclusion; parol evidence rules; burdens of proof; judicial notice; reformed rules. Two hours a week cach semester.
12. Negotiable Instruments.-Ncgotiable promissory notes and bills of exchange, their origin, history, and development ; the recuisites of negotiability, the rights and liabilitics of parties, the effect of cndorsement and transfer; presentment, dishonor, and protest; the defenses which may be interposed. Two hours a week eaeh semester. Towe
13. Property II.-Titles to real property; possessory titles, derivative titles at common law, under statute of uses, and under modern statutes, transfer of titles inter vivos; covenants for title; estoppel by deed; priorities.

Wills.-The form of wills; testator's eapacity; perpetuities; mistake; fraud and undue influence; revocation and republication of wills; probate and construction of wills; legacies, elaims, and the doctrine of election. Three hours a week each semester.

Kirkwoon
14. Sales.-Sales of personal property; essential elcments of a sale; subject matter of sale; actual and potential existence; statute of frauds; conditions and warranties; segregation and identification; remedies of vendor; remedies of vendee. Two hours a week cach scmester.

Spears
15. Code Pleading.-A complete review of remedial law as applied in code jurisdiction with special reference to North Carolina. The form, theory, and classification of civil actions and special proceedings. A complete analysis of all pleadings available in such actions and proceedings; trial. Two hours a week each semester.

Bryson
16. Criminal Procedure.-A survey of the principles of criminal procedure as applied in the American courts. The leading proposals in the current movement for reform. Two hours a week first semester.

Bryson

## IHIRD YEAR'S WORK

17. Corporations.-The nature of a corporation; its creation and citizenship; the effect of irregularity in its creation; the relationship between the corporation and its promoters; the powers and liabilities of corporations; the relationship between the corporation and the state; membership; management ; dissolution; rights and remedies of creditors. Two hours a week each semester.

Towe
18. Constitutional Law.-Making and changing constitutions; separation and delegation of powers of government ; function of judiciary in enforcing; political rights; personal and religious liberty; protection of persons accused of crime; due process and equal protection of law; police power ; eminent domain ; retroactive civil laws; Indians and aliens; territories, dependencies, and new states. Two hours a week each semester.

Maggs
19. Trusts.-Distinctions between trusts and various other relationships; the creation of trusts; the nature of the interest of the cestui que trust; the duties of the trustee; constructive and resulting trusts; termination of trusts. Two hours a week each semester.

Horack
20. Securities.-Essential elements of legal and equitable mortgages; rights of mortgagor and mortgagee at law and equity; title; possession; dower; courtesy; waste; priorities; collateral agreements; forfeiture; redemption, extension, assignment, and discharge of mortgages; chattel mortgages; pledges; trust deeds, and other form of liens and encumbrances. Two hours a week each semester.

Bolich
21. Office, Trial and Appellate Practice.-Open to members of the senior class. Lectures and exercises relating to the practical work of a lawyer ; drafting of instruments; preparing of pleadings and trial briefs; the various trial methods and the steps taken in the trial of a case; periecting an appeal; the appeal brief; procedure in the Supreme Court. Three hours a week each semester.

Bryson
22. Conflicts.-The rules determining the rights of parties in private law, where at least one of the operative facts in the case is connected with some other state or country than the one in which suit is brought. The principal problems arising in the law of obligations, property, inheritance, and family law ; in the administration of estates; and in the enforcement of foreign judgments. Two hours a week each semester.

Maggs
23. Domestic Relations.-Relation of husband and wife, parent and child, guardian and ward; marriage, its duties and obligations; annulment, divorce, and maintenance including a study of the personal and property rights of the parties. Two hours a week each semester.

Spears
24. Partnership.-Requisite; nature of the relation as between the (a) partners, (b) third persons; what is required as to form: authority of partners: actions by and betwcen partners; accounting and dissolution; Limited Partnership; the so-called "Common Law Company." Two hours a week each semester. Towe

The subjects as outlined for the first year are all required. Electives are available to second and third year students with the approval of the faculty of the Law School.

## LIBRARY

In addition to the extensive resources of the general library the Law Library consists of approximately 12,500 volumes.

## METHOD OF INSTRUCTION

The case-book method is employed as the basis of instruction.

## MORDECAI LAW SOCIETY

This organization of the law stuclents was established in 1927 in memory of the late Dean Samuel Fox Mordecai.

All students of the Law School are participating members of this society, which, with the advice and coöperation of the faculty, seeks to foster legal attainment. Its program at meetings includes the holding of moot courts, the reading of papers on topics of the law, the discussion of recent cases of importance, and addresses by prominent lawers.


# BULLETIN <br> OF <br> Duke University 

## THE GRADUATE SCHOOL OF ARTS AND SCIENCES




# BULLETIN OF <br> Duke University 

THE GRADUATE SCHOOL OF ARTS AND SCIENCES



1929-1930
ANNOUNCEMENTS FOR 1930-1931


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## UNIVERSITY CALENDAR

1930
June
June 9. Monday-Registration of students for Summer School, first term.
June 10. Tuesday-Instruction begins for Summer School, first term.
July 4. Friday-Independence Day-A holiday.
July 18-19. Friday, Saturday-Final Examinations for Summer School, first term.
July 21. Monday-Instruction begins for Summer School, second term.
Aug. 27-28. Wednesday, Thursday-Final Examinations for Summer School, second term.
Sept. 20. Saturday, 4 P.m.-First regular faculty meeting of the academic year.
Sept. 24. Wednesday-Formal opening of college. Registration of matriculated students.
Sept. 25. Thursday-Recitations for Sophomores, Juniors, and Seniors begin.
Sept. 25-26-27. Thursday, 9 A.m. to 1 р.м., $2: 30$ р.м. to 4 p.м.; Friday, 9 A.m. to 1 Р.м., $2: 30$ f.м. to 5 p.м.; Saturday, 9 A.M. to 1 P.M.-Registration of graduate students.

Nov. 11. Tuesday-Armistice Day-Part holiday-Public exercises.
Nov. 27. Thursday-Thanksgiving Day-A holiday.
Dec. 11. Thursday-Duke University Day—Not a holiday.
Dec. 22. Monday, 1 p.m.-Christmas recess begins.
1931
Jan.
3. Saturday, 8:30 A.m.-Instruction is resumed.

Jan. 21. Wednesday-Mid-year examinations begin.
Jan. 31. Saturday-Last day for matriculation for second semester.
Feb. 2. Monday-Second semester begins.
Feb. 23. Monday-A holiday-Civic celebration in honor of Washington's birthday.
March 14. Saturday—Last day for applying for University fellowships, graduate assistantships, and graduate scholarships.

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June
2. Thursday, 4 p.m.-Easter recess begins.
7. Tuesday, 8:30 A.m.-Instruction is resumed.

1. Friday-Last day for submitting theses for degree of Doctor of Philosophy.
2. Friday-Last day for submitting theses for degrees of Master of Arts and Master of Education.
3. Thursday-Final examinations begin.
4. Sunday-President's address to graduating class.
5. Monday-Annual meeting of the Board of Trustees.
6. Monday evening-Graduating orations.
7. Tuesday morning-Commencement sermon.
8. Tuesday-Alumni Day-Class Reunions.

Afternoon-Alumni Address-Meeting of the Alumni Association.
Afternoon-Alumnae Address-Meeting of the
Alumnae Association.
9. Tuesday evening-Reception in honor of the graduating class.
10. Wednesday morning-Commencement address; graduating exercises.
10. Wednesday afternoon at sunset-Lowering of the Flag by the graduating class.

## OFFICERS OF ADMINISTRATION

> WILLIAM PRESTON FEW, A.B., A.M., Ph.D., LL.D. President ROBERT LEE FLOWERS, A.M., LL.D. Vice-President in the Business Division
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Luther Mason Dimmitt, A.B., Th.M., M.A. 1522 Hermitage Court Assistant Professor of Education
-Joseph Banks Rhine, B.S., Ph.D.
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- Karl Edward Zener, A.B., A.M., Ph.D.

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*Alban Gregory Widgery, M.A. Professor of Philosophy

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## UNIVERSITY FELLOWS

Ashburn, Karl Everett Economics Dormitory No. 1
A.B., A.M. Texas Christian University

Brecher, Gerhard Karl Botany Dormitory No. 1
Adolf Otto
Gymnasium. Dresden; University of Hamburg, Germany
Doob, Leonard William Psychology Dormitory No. 1
A.B. Dartmouth College

Fennell, Richard A. Zoölogy Dormitory No. 1
A.B. Birmingham-Southern College

| Ford, Grover Mancil <br> B.S. Davidson College, M.S | Chemistry <br> Emory Un | Dormitory No. |
| :---: | :---: | :---: |
| Hagan, Charles Banner <br> A.B. Emory and Henry Col | Political S ge, A.M. | Dormitory No. 1 ty of Virginia |
| $\dagger$ Harmon, Thomas Leonhardt A.B. Emory, A.M. Universi | Economics of Chicago | 923 Fifth St. |
| Jenkins, Sanford Swindell A.B., A.M. Duke University | Chemistry | 809 Second St. |
| Mabry, William Alexander A.B., A.M. Duke University | History <br> A.M. Har | Dormitory No. 1 niversity |
| Major, Charles Leslie <br> A.B., A.M. William and Ma | Education y College | 814 Sixth St. |
| Metler, Alvin Velbert B.S. Adrian College | Chemistry | 1120 W. Main St. |
| Pace, Donald Metcalf <br> B.S. Susquehanna University | Zoölogy <br> A.M. Duk | Dormitory No. 1 ersity |
| Parks, E. Taylor <br> A.B. Carson-Newman Colle | History <br> e, A.M. Un | Dormitory No. 1 y of Tennessee |
| Patterson, John Clarke <br> A.B., A.M. University of T | History xas | Dormitory No. 1 |
| Root, Raymond Willard <br> A.B. Milton College, A.M. | Zoölogy uke Univer | 205 Watts St. |
| *Sharkey, William Kenneth <br> A.B. DePauw University, | Economics <br> M. Brown | 817 Second St. rsity |
| Smith, Culver Haywood <br> A.B. Duke University, A.M. | History <br> Yale Unive | Box 452, D. U. |
| Smith, Robert Sidney <br> A.B., A.M. Amherst College | Economics | Box 754, D. U |
| Stephens, Hubert Wesley <br> B.S. Illinois Wesleyan Colleg | Physics <br> e | Dormitory No. 1 |
| Stokes, Ruth Wyckliffe <br> B. A. Winthrop College, M.A | Mathematics <br> A. Vanderbilt | 12 Glenn Apts. versity |
| Sugden, Herbert Wilfred <br> A.B. Harvard University, A. | English <br> M. Duke Un | 201 Faculty Apts. ity |
| Sydnor, Elmer Williams <br> A.B. Richmond College, A.M. | English Columbia | 1012 Gloria Ave. rsity |

[^37]Tipton, Samuel Ridley Zoölogy Dormitory No. 1
A.B. Mercer University

Westerhof, Anthony Cornelius Psychology Dormitory No. 1 A.B. Calvin College, A.M. Duke University

## INDUSTRIAL RESEARCH FELLOWS

(Liggett and Myers Foundation)
Darkis, Frederick Randolph Chemistry 506 Buchanan Blvd. B.S., M.S., Ph.D. University of Maryland

Hall, Joseph Alfred Chemistry 1118 N. Duke St.
B.A., M.S. University of Wisconsin

Jones, Edwin Patterson Chemistry 619 S. Duke St.
A.B., A.M. Duke University, Ph.D. Yale University

Powell, Gamaliel Wyatte Holmes Chemistry 1801 Lakewood Ave. B.S., M.S. Emory University .

Powell, Thomas Edward Zoölogy Elon College, N. C. B.A. Elon College, M.A. University of North Carolina

## GRADUATE ASSISTANTS

Anderson, Ewing English Dormitory No. 1
A.B. University of Florida, A.M. Duke University

Basler, Roy Prentice English 214 Faculty Apts.
A.B. Central College, Missouri

Blake, Nelson Morehouse History Dormitory No. 1
A.B. George Washington, A.M. Duke University

Braswell, John William English Dormitory No. 3
A.B. Duke University

Brewer, Anne Eliza French Meredith College
A.B. Meredith College, A.M. Columbia University

Burch, James Charlie Horton English 316 N. Elizabeth St.
A.B., A.M. Duke University

Callihan, Alfred Dixon Physics Dormitory No. 1
A.B. Marshall College

Chesley, Leon Carey Zoölogy Dormitory No. 1
B.S. Susquehanna University

Clark, Thomas Dionysius History 119 Jarvis
A.B. University of Mississippi, A.M. University of Kentucky

Cox, Henry Miot Mathematics Faculty Apts.
B.S. Emory University

Davidson, Elizabeth Huey History 12 Glenn Apts.
B.S., M.S. University of Tennessee

Elmore, Kelly Lee Chemistry 115 Faculty Apts.
A.B. Duke University

Gillaspie, Athey Graves Chemistry Dormitory No. 1
B.S. Lynchburg College

Godard, James McFate Education Dormitory No. 1
A.B. Park College

Jackson, David Kelly, Jr. English Dormitory No. 1 A.B. Duke University

Little, Lawrence Calvin Religion 819 Sixth St. A.B. Davidson, A.M. Duke University

McCulloch, Thomas Logan Psychology Dormitory No. 1
A.B. Whittier College

McMillan, Montague English 264 Faculty Apts.
A.B. Limestone College, A.M. George Washington

Pettigrew, Richard Campbell English Dormitory No. 1 A.B. Furman University, A.M. University of North Carolina

Priepke, Rudolf Julius Chemistry Dormitory No. 1
B.S. Elmhurst College

Schallert, Dorothy Amaryllys Zoölogy 606 Buchanan Blvd. A.B., A.M. Duke University

Seay, Hibernia French 702 Buchanan Blvd.
A.B. Randolph-Macon College

Simpson, William Hays Political Science Dormitory No. 1 A.B. Tusculum College, A.M. Duke University

Snuggs, Henry Lawrence English 1018 Gloria Ave. A.B. Wake Forest College, A.M. Duke University

Trentham, Shannon Otis Botany 814 Second St.
B.S. Carson-Newman College

Trueblood, Paul Graham English Dormitory No. 1
A.B. Willamette College

Whitman, William Tate Accounting Box 606, D. U.
A.B. Duke University

Williams, Harold Fish Botany 909 Gregson St.
Ph.B. University of Wisconsin

## GRADUATE SCHOLARS

Balch, Clifford Perry History Dormitory No. 1
A.B. Franklin and Marshall College

Chen, William Yuanlung Psychology Dormitory No. 1
A.B., A.M. Syracuse University
deBruyne, Jacob Marinus Anton Chemistry 1023 Monmouth Ave.
A.B. Duke University

Dunkle, Margaret Robert Latin 702 Buchanan Blvd.
A.B. Florida State College for Women

Fry, Glenn Ansel Psychology Dormitory No. 1
A.B. Davidson College

Gathings, James Anderson
Political Science Dormitory No. 1
A.B. Furman University

Gillock, Emmie May Mathematics 1030 W . Trinity Ave.
A.B. Mississippi State College for Women

Griffin, Mabel Jeannette Mathematics 1211 Carolina Ave. A.B. Duke University

McCaskill, Leona Wilson Latin 806 Third St.
A.B. Winthrop College

McEwen, Noble Ralph Education Dormitory No. 1
A.B. Birmingham-Southern

Miller, Paul Jones, Jr. Political Science 2306 Twelfth St. B.S. Mississippi A. \& M. College

Pritchett, William Kendrick Greek Dormitory No. 1
A.B. Davidson College

Underwood, Eugene Taylor French Dormitory No. 1
A.B. Butler University

# GRADUATE INSTRUCTION IN DUKE UNIVERSITY 

## GENERAL STATEMENT

Prior to 1916 there was no separate organization within Trinity College to promote and supervise graduate studies. However, there had been for many years a limited number of graduate students who completed a year of post graduate work and received the degree of master of arts. The work of such students was supervised through the office of the Dean of Trinity College. Many of these graduate students went out from Trinity College to continue their studies at other colleges and universities and later achieved distinction as teachers and scholars.

In September, 1916, President Few appointed a Committee on Graduate Instruction to deal with the problems involved in the promotion and administration of graduate work. In that year there were six graduate students in the College, and seven graduates of the College were enrolled in the professional School of Law. During and immediately after the World War the number of graduate students remained small, but by the year 1923-1924 the graduate enrollment had increased to thirtyfive, exclusive of the college graduates enrolled in the School of Law.

The growing importance of graduate work in Trinity College caused the Committee on Graduate Instruction, during the first semester of the year 1923-1924, to make a careful study of requirements for admission to graduate work, of requirements for advanced degrees, and of other conditions affecting standards of graduate instruction. A comprehensive report was prepared by the Committee and adopted by the faculty. Provision was made for the granting of two advanced degrees, master of arts and master of education. Regulations were adopted which increased the distinction between graduate and undergraduate work. A thesis requirement was made for every candidate for a graduate degree, and provision was made for the examination of theses by faculty committees. The Committee on Graduate Instruction undertook a closer supervision of graduate courses and of the work of graduate students.

Thus, when Trinity College became Duke University in December, 1924, noteworthy progress had already been made in organizing a graduate department with advanced courses in many fields of study and with high standards. In accepting Mr. Duke's great benefaction, the Trustees definitely included a Graduate School of Arts and Sciences as a member of the University organization.

In the academic year 1926-1927 a Council on Graduate Instruction was established in the University to exercise a general supervision over graduate work in arts and sciences, and Professor William H. Glasson was appointed Dean of the Graduate School of Arts and Sciences.

## THE LIBRARY

Duke University has long possessed an excellent Library for the purposes of undergraduate instruction. In recent years special funds have been provided and appropriations made to collect material for the use of members of the faculty and graduate students desiring to engage in research work. Particular attention has been given to obtaining complete sets of important periodicals, biographical and bibliographical collections, files of Southern newspapers, collections of state papers, parliamentary debates, and historical documents, proceedings of scientific societies, and standard editions of American and foreign authors. This policy of constantly enriching the Library's store of source material will be continued.

Up to April 10, 1930, the Duke University Library had received and accessioned 151,912 bound volumes and 22,448 pamphlets. Many thousands of volumes and pamphlets have not yet been accessioned, and other purchases of books, periodicals, and brochures are in Europe awaiting shipment. The amount available for the purchase of books, newspapers, and periodicals for the year $1928-29$ was $\$ 75,916.48$. For the year 1929-30, the appropriations for books, periodicals and binding exceeded one hundred thousand dollars.

Beginning with the autumn of 1930 the Library building on the East Campus will be used by the Woman's College. A new University Library building, especially designed and equipped to facilitate research, will be opened on the West Campus. This building is an unusually fine example of Gothic
architecture. It is built of stone from the University's quarries near Hillsboro, N. C.

In the basement are the receiving room for books and periodicals which come to the Library, the offices of the order division, work rooms for the Library staff and a commodious stack room fitted with special stacks for newspapers.

On the first floor an important feature is a large reserve book room in which books in constant use by classes are kept for reference and for the time being withdrawn from general circulation. The seating capacity of this room is about 140 . On the same floor are a large periodical room, a manuscript room, a treasure room, and two offices.

The principal features of the second floor are the general delivery room with a spacious hall, the large public card catalogue, the main reading room with a seating capacity for more than 150, the cataloguing room and four offices for members of the Library staff.

On the third floor of the building a special reading room for graduate students is provided with a seating capacity of about 60. There are also on this floor eight seminar rooms, two studies and a large special reading room.

In the tower of the Library building are the fourth and fifth stories which provide six seminar rooms and two studies.

The main stack room of the Library building is seven stories high. The initial capacity of the main stacks is estimated as considerably in excess of 300,000 volumes. The stacks in the nearby Library of the Law School will provide for 60,000 volumes and the stacks in the special Library of the School of Religion will accommodate about 40,000 volumes. The libraries of the Law School and the School of Religion are connected by passageways to the University Library. In the School of Medicine is the Hospital Library with a collection which is at present about 20,000 volumes. There are also stacks provided for special scientific libraries in the Biology, Chemistry and Physics buildings.

Especial attention has been given in the construction of the Library to facilities for prompt delivery of books. The general delivery room is connected by pneumatic tubes with the reserve book room, the graduate reading room, the Law Library, the School of Religion Library and also with each floor level of
the main stacks. The general delivery room, the reserve book room, the graduate reading room and each floor of the main stacks will also have the service of book lifts or carriers.

The University Library is now receiving by subscription and donation 1,003 newspapers and periodicals. Thirty-five sets of periodicals have been added during the year 1929-30. Physics, Economics, History, Psychology, Latin, Law, and Religion have had large allowances. German, Austrian, and French newspapers covering the World War period constitute an outstanding acquisition. More than $\$ 5,800$ has been spent for newspapers.

The Hospital Library in connection with the School of Medicine has expended during the academic year about fifty thousand dollars for books, sets of periodicals and binding. The appropriations for the Library of the Law School have amounted to nearly $\$ 12,000$.

There have been many special purchases including 1,700 volumes of the library of Paul Hamilton Hayne, a Peruvian collection of 3,000 volumes in history and political science, and rare Confederate, Chivers, and Rossetti manuscripts.

The Library possesses a splendid collection of periodical sets in biology and chemistry. Large accessions have been made to the excellent equipment of periodicals in history, economics and political science. Recent purchases have gone far toward completing the important sets of the London Economist, the Statist and the Commercial and Financial Chronicle.

The Library has an unusually good collection of books and periodicals in international law. Several important foreign periodicals have recently been added in this field. Documentary reports of the decisions of various arbitral commissions, the publications of the Permanent Court of International Justice complete to date, and treaties on various phases of the subject of arbitration are available for the investigator.

One of the most valuable possessions of the Library is the Lanson collection in French literature, consisting of 9,000 volumes and 2,000 monographs and brochures. This collection includes authors and works from the fifteenth century to the present, together with the most useful critical volumes on authors and their works. The material on Voltaire and Rousseau is especially comprehensive and valuable. There are in
the collection many early editions and rare volumes of the sixteenth, seventeenth, and eighteenth centuries. This collection was Professor Lanson's private library and will give the Duke University Library very superior facilities for students of French literature.

Further large additions to the research material in the $\mathrm{Li}-$ brary are in prospect for later announcement.

## NEW SCIENCE LABORATORIES

New laboratory buildings have been erected on the West Campus in biology, physics and chemistry. Graduate students will find available the most modern equipment and facilities for research. In addition to the provision of modern apparatus, large sums have recently been expended to purchase important additions to the collections of scientific periodicals and publications in the departmental libraries, the University Library, and the Hospital Library.

In the School of Medicine elaborate facilities are provided for post graduate research in the various branches of medical science. Especial attention will be given to training in preventive medicine and public health work.

## GRADUATE DORMITORIES

One or more sections of the new dormitories on the West Campus will be reserved for graduate men. Board can be secured at the new Union building, which also has unusually attractive provisions for social intercourse and activities. Graduate women will find dormitory accommodations of the highest type on the East Campus. The Union building on the East Campus will furnish meals at reasonable rates and serve as a center of campus life.

## GRADUATE CLUB

One of the active organizations of the University is the Graduate Club. Its meetings are held monthly and are devoted to the professional and social interests of graduate students. Many eminent speakers have addressed the club at meetings open to the public. Recent speakers have been President W. P. Few, Professor William McDougall, Professor J. Fred Rippy,

Professor G. T. Hargitt, Professor Lewis Chase, and Professor C. M. Child. Mr. W. H. Simpson was president of the Graduate Club during the year 1929-30.

## FELLOWSHIPS AND SCHOLARSHIPS

For the assistance and encouragement of graduate students of high character and marked ability, the University has established a considerable number of fellowships and scholarships. The Angier B. Duke Memorial, Incorporated, awards an annual fellowship of one thousand dollars to a graduate student of exceptional merit. Three University fellowships of eight hundred dollars each, five University fellowships of seven hundred dollars each, and sixteen University fellowships of six hundred dollars each have been established. There are also eighteen graduate scholarships of three hundred dollars each. Holders of fellowships and scholarships will be expected to pay the tuition fee and such additional fees as are regularly required. Applications for these appointments should be made on or before March 15 of each year. In case vacancies occur, applications submitted on a later date will be considered.

There are also a number of graduate assistantships open in the various departments with compensation ranging from $\$ 300$ to $\$ 800$. Graduate assistants are under obligation to give part of their time to such work in the departments as may be assigned to them. They will usually be unable to carry a full program of study. Information regarding fellowships, graduate scholarships, and graduate assistantships, together with application blanks, may be obtained from the Dean of the Graduate School, Duke University, Durham, North Carolina.

## ENCOURAGEMENT OF RESEARCH

The President of the University appoints annually a Faculty Committee on Research consisting of three members, the President himself being a' fourth member ex officio. On April 1 of each year the Chairman of the Committee on Research receives written applications from members of the Faculty for stipends for the encouragement of research. Amounts granted may be expended for the employment of research assistants, or for the purchase of books, apparatus, and materials. The amount of
the stipend may not exceed five hundred dollars. Each member of the Faculty to whom a research stipend is granted must within twelve months make a written report of the progress of his investigation.

## UNIVERSITY PRESS

The Duke University Press affords facilities for the publication of many scholarly books and articles. The press issues three quarterly reviews: The South Atlantic Quarterly, The Hispanic American Historical Review, and American Literature.

A list of the publications of the Duke University Press may be obtained from the manager of the Press, Durham, North Carolina.

## REQUIREMENTS FOR ADMISSION AND DEGREES

## ADMISSION TO GRADUATE COURSES

Students who have received a bachelor's degree for a four years' undergraduate course from a college of sufficiently high standing may be admitted to take courses in the Graduate School of Arts and Sciences of Duke University. The department concerned will determine whether a student is prepared to take any particular course. Admission to graduate courses does not necessarily imply admission to candidacy for a degree. A candidate for admission as a graduate student should present satisfactory evidence that he has received a bachelor's degree from a college or university which is a member of the Association of Colleges and Secondary Schools of the Southern States or of one of the similar associations in other sections of the country (provided that the degree must have been conferred after the admission of the college or university to membership in said association) ; or from a North Carolina college whose bachelor of arts' or other bachelor's degree is accepted by the State Department of Education as the basis for issuing the high school or primary certificate of Class A. A degree from an institution outside of the state of North Carolina, not provided for above, may be accepted when an investigation in the individual case shows that qualifications are satisfactory.

## ADVANCED DEGREES

The degrees offered in the Graduate School of Arts and Sciences are master of arts (A.M.), master of education (M.Ed.), and doctor of philosophy (Ph.D.). Some departments of the University are now prepared to give a full program of work leading to the degree of doctor of philosophy ; other departments are gradually enlarging the scope of their instruction. As rapidly as is consistent with careful selection, new appointments are being made to the faculty of professors who will give their attention primarily to graduate courses and the direction of research.

## ADMISSION TO CANDIDACY FOR A DEGREE

A graduate student who desires to be accepted as a candidate for a degree should file with the Dean of the Graduate School an official transcript of the record of his undergraduate work and also of any graduate courses he may have completed. He should also confer with the head, or chairman, of the department in which he desires to take his major work. Applications for admission to candidacy for the degree of master of arts or master of education should be made at the beginning of the first year of graduate work, and for the degree of doctor of philosophy at the beginning of the second year of graduate work. Before receiving recognition as a candidate for a degree, the student must satisfy both the general requirements of the Graduate School and the special requirements of the department in which he is taking his major work.

## TIE DEGREE OF MASTER OF ARTS

Candidates for the degree of master of arts are required to have a reading knowledge of two foreign languages, evidenced by examination or by credit obtained for at least six semester-hours of college work in each. If this requirement has not been satisfied before admission to candidacy for the degree, the required foreign language work must be completed before the degree is conferred and will not be counted for credit toward the degree. The two foreign languages offered must be acceptable to the department in which the candidate is taking his major work.

To obtain the degree of master of arts a candidate must complete satisfactorily twenty-four semester-hours of graduate courses and a thesis. The credit for the thesis is six semester-hours. Each candidate for the degree must select a major subject in which the minimum requirement is twelve semester-hours and the thesis. [Before selecting his major in a department, a student must have completed a minimum of twelve semester-hours of approved preliminary courses in that department and twelve additional semester-hours either in that department or in related work.] A candidate must take six semester-hours of graduate work in a minor subject approved by the major department, and the remaining six semester-hours in the major or minor subjects or in a department approved by the major department and by the Graduate Council. No undergraduate course may be credited toward the degree of master of arts.

## MINIMUM RESIDENCE REQUIREMENT

The minimum residence requirement of candidates for the master's degree is one academic year. Often a longer period of residence will prove necessary. In the case of graduate students who take all the work for the master's degree in the Summer School, the minimum residence requirement is five summer terms of six weeks each.

## SPECIAL REQUIREMENTS FOR CANDIDATES FOR THE A.M. DEGREE IN THE SCHOOL OF RELIGION

Students in the School of Religion may become candidates for the degree of Master of Arts under the following regulations:

After a student in the School of Religion has completed a period of one academic year in residence in the Duke University School of Religion, or in an approved school of similar standing, and has secured thirty semester-hours of credit in studies approved by the faculty of the School of Religion, he may apply to the faculty of the School of Religion for permission to become a candidate for the A.M. degree. If he has maintained a creditable standing in the first year's work of the School of Religion he may be recommended by the faculty of the School of Religion to the Graduate Council for admission to the Graduate School of Arts and Sciences as a candidate for the degree of Master of Arts.

The student shall in the ensuing year take twelve semester-hours of work and write a thesis for the A.M. degree in some department of the School of Religion in which he has previously received six semesterhours of credit for resident work. In addition, the student shall take twelve semester-hours of work in related departments of the School of Religion, or in related departments offering graduate courses in the other schools of the University. The student's selection of courses shall be approved by the faculty of the School of Religion and by the Graduate Council.

In all other respects the candidate for the A.M. in the field of religion shall conform to the usual regulations of the Graduate Council, such as the approval by the Graduate Council of all courses in the School of Religion for which graduate credit is asked, the prerequisites in foreign languages, and the examination of the thesis.

Students who are recommended to the Graduate Council by the faculty of the School of Religion as candidates for the A.M. degree under the above plan shall be registered for the following year in the Graduate School of the University. They may also be registered in duplicate in the School of Religion for such part of the year's work as will be accepted by the faculty of the School of Religion toward the degree of Bachelor of Divinity.

## DEGREE OF MASTER OF EDUCATION

The degree of master of education is granted to teachers, or others engaged in educational service, upon completion of the prescribed program of study. Candidates for the degree must have had two years of practical experience in teaching when the degree is conferred. This experience may be obtained in the two years immediately prior to entering upon candidacy for the degree, or it may be obtained concurrently with the period of study for the degree.

A preliminary requirement for admission to candidacy for this degree is the completion of a minimum of twelve semester-hours of approved undergraduate work in education, including work in educational psychology and work in either history of education, educational sociology, or school administration.

The requirements for the degree of master of education are twentyfour semester-hours of graduate courses and a thesis. Candidates must take a minimum of twelve semester-hours of work and write a thesis in the Department of Education. At least six semester-hours must be taken in some department other than the Department of Education. Students who are preparing to teach are advised strongly to take twelve semester-hours of graduate work in the subjects they intend to teach. In such cases the thesis may be prepared under the joint supervision of a department in which the student intends to teach and the Department of Education.

The residence requirements for the degree of master of education are the same as those for the degree of master of arts.

## THESIS FOR THE MASTER'S DEGREE

The title of the thesis required in partial fulfilment of the requirements for the degree of master of arts or master of education must be approved by the department or departments concerned and filed with the Dean of the Graduate School on or before November 1 of the academic year in which it is expected that the degree will be conferred.

Three bound typewritten copies of each thesis must be submitted to the Dean of the Graduate School in approved form on or before May 15 of the year in which the degree is conferred. The thesis is passed upon and accepted or rejected by an examining committee of three members of the faculty. Each candidate is required to appear before the committee for an oral examination on the thesis.

## SUMMER SCHOOL WORK FOR THE MASTER'S DEGREE

Graduate students may not receive more than six semester-hours of credit for work taken in one summer session of six weeks. The degree of master of arts or master of education can be earned in five such summer sessions by students who are well prepared for graduate work. All the work offered for the master's degree must be completed within a period of six years.

## CREDIT TOWARD THE MASTER'S DEGREE FOR WORK DONE ELSEWHERE

No credit toward advanced degrees is given for university extension or correspondence courses.

Not more than six semester-hours of credit toward the master's degree may be given to graduates of Duke University or of other approved colleges or universities for acceptable graduate courses or research work completed elsewhere. Such credit shall not shorten the minimum period of residence required at Duke University.

## THE DEGREE OF DOCTOR OF PHILOSOPHY

A student who plans to enter upon a program of work leading to the degree of doctor of philosophy should consult, or enter into correspondence with, the Dean of the Graduate School and the head of the department concerned. He will then be advised as to the possibility of securing the necessary instruction and supervision of research in the desired field.

The Council on Graduate Instruction has adopted the following regulations governing the conferring of the degree of doctor of philosophy:

1. The Degree. The degree of doctor of philosophy is a research degree; it is not based merely upon the completion of a prescribed period of study or upon the obtaining of credit for a given number of courses. The granting of the degree will be based primarily upon evidence of high attainments in a special field of knowledge and upon the production of a thesis embodying the results of original research.
2. Residence Requirements. The normal period of resident graduate study, after the general requirements of admission to the Graduate School have been satisfied, is not less than three academic years. The candidate will be required to spend at least either the last year in actual residence at Duke University, or the first two years. A student whose undergraduate work is insufficient in amount or unsatisfactory in character may expect to spend additional time in preliminary courses essential as a basis for the graduate work he proposes to undertake. Credit for one year of work done in summer school sessions may be given with the approval of the Graduate Council and of the department in which the student takes his major work. Except in unusual cases, graduate work of fragmentary character taken over a long period of years, or work completed many years before the student becomes a candidate for the degree at Duke University, will not be accepted as satisfying the requirements of residence.
3. Application for Candidacy for the Ph.D. degree. A student desiring to become a candidate for the Ph.D. degree is ordinarily required to file with the Dean of the Graduate School, not later than the beginning of the second year of graduate work, a formal application indicating in what department and under what professor he proposes to carry on research. A committee will then be appointed to supervise the student's work, with the professor in charge of his research as chairman. If and when the committee finds that the preliminary requirements of the major department have been satisfied, the chairman of the committee shall report the fact in writing to the Dean of the Graduate School. The student's program of study will be arranged after consultation with this committee and must secure its approval. In the case of students who come to Duke University for only the last year of graduate work, and in special cases approved by the Graduate Council, the application for recognition as a candidate for the Ph.D. degree may be filed later than provided above, but not later than October 15 of the academic year in which it is desired that the degree be conferred.
4. Preliminary Examination. Toward the end of the second full year of graduate work (or in special cases at the beginning of the third year), a preliminary examination of each candidate will be held covering the general field of his major subject. This examination will be conducted by the committee in charge of the student's work and will be either oral or written, or both, as the committee may determine. A student who passes this examination will be recognized as a candidate for the Ph.D. degree. At the discretion of a candidate's committee, the examination on his minor subject or subjects may be held at the time of his preliminary examination instead of at the time of his final examination.
5. Program of Study. The program of study of an applicant for the Ph.D. degree is subject to the approval of the Graduate Council and of the committee provided for in Section 3 above. The student must select a major field and one or two minor related fields. When a department offers instruction in a sufficient variety of subjects and the needs
of the individual student seem to require it, the Graduate Council may permit a major and minor to be taken in the same department.
6. Foreign Language Requirements. A reading knowledge of French and German will ordinarily be required. A substitution for one of these languages may be made, however, by the consent of the Graduate Council and of the department in which a student takes his major work. The student will be examined on one of the foreign languages at the beginning of his second year of graduate work, and must have qualified in both by the end of the second year of his graduate work. The department in which he takes his major work may indicate preference as to the language in which the student shall first be examined. Foreign language examinations will be conducted by the appropriate language department in conjunction with the department in which the student has his major field of work.
7. Thesis. The thesis for the Ph.D. degree must be a contribution to knowledge. The subject of the thesis must be filed with the Dean of the Graduate School on or before October 15 of the academic year in which the candidate desires to take the final examinations for his degree. The subject must receive the written approval of the head, or chairman, of the department in which the candidate has his major field of work and also of the professor under whom the thesis is being written. The thesis must be completed to the satisfaction of the professor under whom it is written, and three typewritten copies in approved form must be deposited with the Dean of the Graduate School on or before May 1, if the student desires to be examined on the thesis in the same academic year. The title page must be approved by the major department and by the Dean of the Graduate School.

The candidate's thesis must be published either in its original form or in a modified form approved by the Dean of the Graduate School and the committee in charge of the candidate's work. The degree will not be conferred until publication of the thesis within two years, in approved form, has been guaranteed in a way satisfactory to the Dean of the Graduate School and the professor under whom the thesis was written.
8. Final Examination. The final examination on the thesis and on the subject matter of the major and minor fields will be oral. The examination on both thesis and major and minor work will be held at the same time unless otherwise arranged by special permission of the Graduate Council.

## THE TRAINING OF COLLEGE TEACHERS

College and preparatory schools are constantly calling upon the university graduate schools for efficient teachers. The Duke University Graduate School will endeavor to discover among the candidates for advanced degrees those students who show promise of becoming good teachers. Provision will be made in the various departments for the consideration and discussion
of problems of teaching. Graduate students who expect to teach will be given opportunity to gain practical experience under the supervision of successful teachers. The Graduate School will keep such records as will enable it to recommend with confidence students who are likely to prove efficient as teachers.

## THE GRADING OF GRADUATE STUDENTS

Members of the faculty are expected to report the grades of graduate students promptly at the end of each semester on the cards provided for that purpose.

In the grading of graduate students, $S$ or satisfactory shall represent work of an acceptable character, G or good shall be the next higher grade, and E or exceptional shall be the highest grade. F or failing indicates that the grade of the student is below passing. In a course in which both graduates and undergraduates are enrolled, the grade S shall represent approximately the degree of attainment marked 80 in the case of an undergraduate. A mark of "Incomplete" may be given when a student has failed, for an acceptable reason, to complete some portion of the required work in a course in which his standing is generally satisfactory. The student should arrange with the instructor to complete the remaining work of the course as promptly as possible.

## GENERAL REGULATIONS

Not more than twenty-five students are permitted in a class giving graduate credit, nor are undergraduate students below the senior year permitted in such a class. Exceptions to this rule may be made by special permission of the Graduate Council on recommendation of the department concerned.

In courses exclusively for graduates, students may be given extra credit in semester-hours for extra work done with the approval of the Grad"nte Council on recommendation of the department.

# COURSES OF INSTRUCTION 

## DEPARTMENT OF BIOLOGY

(Certain undergraduate courses are open to graduate students with the approval of the department. See the "Bulletin of Undergraduate Instruction.")

## BOTANY

FOR SENIORS AND GRADUATES
251. Plant Physiology.-First semester. Lectures: to be arranged. 4 s.h. Assistant Professor Avery
Prerequisite, Botany 1.
201. Cytology.-A study of the cell. Laboratory and lectures. Second semester. 4 s.h. Assistant Professor Avery

Prerequisites, Botany 1 or Zoollogy 1 and one other course of intermediate grade.
202. Inheritance and Variation.-A study of the principles of inheritance in plants and animals. Lectures, assigned readings, and some laboratory work. Second semester. 3 s.h.

Professor Blomquist
Prerequisites, Botany 1 or Zoölogy 1.
225. Special Problems.-Hours and credits to be arranged.

Botanical Staff
FOR GRADUATES
311. Advanced Mycology.-Laboratory and lectures. 4 s.h.

Professor Wolf
312. Advanced Plant Pathology.-Laboratory and lectures. 4 s.h.

Professor Wolf
352. Advanced Plant Anatomy.-Structure and development of anatomy of economic plants. Second semester. 4 s.h.

Assistant Professor Avery
356. Taxonomy of Special Groups.-Second semester. 4 s.h.

Professor Blomquist
399. General Botanical Seminar.-One hour per week throughout the year. Required of all graduates majoring in botany. Seniors are invited to attend. Hour to be arranged. 2 s.h. Botanical Staff

## ZOOLOGY

FOR SENIORS AND GRADUATES
152. Comparative Physiology.-The primary functions of animals of all groups and a more detailed study of the physiological processes in mammals. Second semester. 4 s.h.

Professor Hall
Prerequisite, one year of Zoollogy.
181. Animal Micrology.-The technique of preparing normal sections of the various types of tissue. 4 s.h.

Professor Cunningham
191. General Embryology.-The fundamental principles of embryology, especially in the frog and the chick, with some work on the mammal. 4 s.b.

Professor Cunningham
221. Entomology.-The taxonomy, morphology, and physiology of insects, their theoretic and economic aspects. For students who have had at least one year of Zoölogy. Offered in even years. 4 s.h.

Assistant Professor Hopkins
231. Protozoölogy.-A study of the taxonomy, morphology, and physiology of unicellular organisms. For students who have had at least one year of Zoölogy. Offered in alternate years. 4 s.h.

Assistant Professor Hopkins
261. Animal Parasites.-A consideration of animal parasites with particular emphasis upon those infesting man. Of particular interest to students preparing for medicine or public health work. 4 s.h.

Professor Pearse
Prerequisite, Zoölogy 1-2.

COURSES PRIMARILY FOR GRADUATES, BUT OPEN TO SENIORS WITH ADEQUATE TRAINING
272. Ecology.-Natural history of animals-relations to environment. Assigned readings, lectures, reports, conferences. For students who have had at least one year of Zoölogy. Offered in odd years. 2 s.h.

Professor Pearse
201. Animal Behavior.-The development of mind in animals. Assigned readings, lectures, reports, conferences. Offered in even years. 2 s.h.
[Not offered in 1930-31] Professor Pearse
228. Endocrinology.-This course includes the structure, physiology, and embryology of the endocrine glands. The work consists of lectures and reading assignments and reports. 2 s.h.

Professor Cunningham
232. Advanced Protozoölogy.-Lectures and conferences, on the recent developments in the field of Protozoollogy. In the laboratory an individual problem will be undertaken by each student. The prerequisites for the course are (1) a definite and feasible problem, and (2) the proper training for carrying out this problem. 4 s.h.

Assistant Professor Hopkins
219-220. Research.-Students who have had proper training may carry on research under the direction of members of the faculty. Staff
262. Advanced Parasitology.-Lectures, conferences, and readings dealing with practical and theoretical matters relating to animal parasites.

Laboratory work on special problems may be taken in connection with this course by registering for Course 219-220. Offered in odd years. 2 s.h. Professor Pearse
223. Advanced Physiology.-A presentation of some of the problems with which physiologists have been concerned during recent years. Lectures, conferences, and laboratory work. First semester. 4 s.h.

Professor Hall
222. Advanced Ecology.-Readings, conferences, and reports; directed work in field or laboratory. Second semester. 2 or more s.h.

Professor Pearse
292. Experimental Embryology.-Lectures, assigned readings, and reports. In the laboratory a study is made of the effects of environment on various forms of animals, including the frog, chick, and mammal. Students electing laboratory work in connection with this course should register for Zoölogy 219-220. 2 s.h.

Professor Cunningham
[Not offered in 1930-31]

## FOR GRADUATES

351. Seminar.-A weekly meeting of graduate students and faculty to hear reports and to discuss biological facts, theories, and problems. One hour a week throughout the year. 2 s.h.

## DEPARTMENT OF CHEMISTRY

## FOR SENIORS AND GRADUATES

261-262. Physical and Electro Chemistry.-Fundamentals of general theoretical chemistry illustrated by selected laboratory experiments. Recitation: T.Th. at 8:30. Laboratory: F. 2-5. 6 s.h. Professor Gross

Prerequisites: Chemistry 3, 5, College Physics, and College Algebra. Calculus is desirable but is not required.

215-216. Advanced Inorganic Chemistry.-A study of modern valence theory and of inorganic compounds, particularly of the less common types, illustrated by suitable laboratory preparations. Recitations: M.W. at 9:30. Laboratory: F. 2-5. 6 s.h. Assistant Professor Vosburgh

Prerequisites: Chemistry 1, 2, 3, and 5. Chemistry 6 and advanced physics are desirable.
231. Quantitative Analysis.-A continuation of Chemistry 3, involving some of the more difficult analytical methods. One recitation and six laboratory hours for one semester; hours to be arranged. 3 s.h.

Assistant Professor Vosburgh
Prerequisite, Chemistry 3. Chemistry 6 is desirable.
232. Instrumental Analysis.-A study of the use of physical measuring instruments in chemical analysis. One recitation and six laboratory hours for one semester; hours to be arranged. 3 s.h.

Assistant Professor Vosburgh
Prerequisites, Chemistry 3, 6, and 31a. Laboratory Physics is desirable.
241. Physiological Chemistry.-A study of the chemistry of human physiology. Clinical aspects of the subject are treated with reference to the need of prospective medical students. First semester. Recitation: M.W. at 8:30. Laboratory: T.F. 2-5. 4 s.h. Professor Wilson

Prerequisites, Chemistry 3 and 5. Chemistry 6 is desirable, though not required.
244. Metabolism.-Open to students who have completed course 42 or its equivalent, and who have a reading knowledge of German. Lectures and collateral reading deal with the probable fate of foodstuffs in the body, the nitrogen balance, energy requirement, nutritive ratios, vital factors, and ductless glands. The laboratory work consists mainly of blood analysis under both normal and pathological conditions. The laboratory work of this course without the lectures may be taken by students who have passed Chemistry 42 . In this case only two semester hours credit will be given. Second semester. Recitation: M.W. at 8:30. Laboratory: T.F. 2-5. 4 s.h.

Professor Wilson
251-252. Intermediate Organic Chemistry.—Intended for students who have had elementary organic chemistry but whose preparation is insufficient for Chemistry 51 or research, and to meet the minor requirements of graduate students in other departments. Three recitations. 3 s.h.

Assistant Professor Bigelow
253-254. Advanced Organic Chemistry.-A continuation of Chemistry 5, including discussion of the theories of organic chemistry. The laboratory work will include preparations of the more difficult type, requiring reference to the original literature. Lecture: T. at 11. Laboratory: nine hours, to be arranged. 8 s.h.

Assistant Professor Bigelow and Dr. Hauser
Prerequisites, Chemistry 5 or equivalent and a reading knowledge of German.
260. Colloid Chemistry.-An introductory study of the colloidal state of matter. Two recitations and three laboratory hours for one semester; hours to be arranged. 3 s.h.

Assistant Professor Vosburgh
Prerequisites: Chemistry 5 and 6. Calculus, Chemistry 61, and advanced physics are desirable.
271. Introduction to Research.-Lectures on the use of chemical literature, research methods, recording and publication of results, preparation of theses and other topics. One lecture. I s.h.

> Professors Gross and Wilson, Assistant Professors
> Vosburgh and Bigelow
270. Research.-The aim of this course is to give instruction in methods used in the investigation of original problems. Nine hours a week, laboratory, and conferences. 3 or 6 s.h.

Professors Gross and Wilson, Assistant Professors
Vosburgh and Bigelow, and Dr. Hauser

This course is offered in both semesters; students may elect the first semester without taking the second. The amount of credit will depend on whether the course is pursued for one or two semesters. It is open to Seniors who have had courses $3,5^{\text {b }}$, and 6 .

273-274. Seminar.-Open to seniors qualifying for honors in the department and required of all graduate students in chemistry. F. at 12. 2 s.h. Professors Gross and Wilson, Assistant Professors Vosburgh and Bigelow, and Dr. Hauser
256. Organic Analysis.-The elements of organic, qualitative and quantitative analysis, primarily for students taking organic research. Laboratory : nine hours to be arranged. 3 s.h.

Assistant Professor Bigelow and Dr. Hauser
Prerequisite, Chemistry 5 or equivalent.

## FOR GRADUATES

350. Synthetic Organic Methods.-A lecture course, dealing with the application of synthetic organic methods in certain selected fields, such as dyes, pharmaceuticals, perfumes, terpenes, alkaloids, etc. One semes-ter-either fall or spring. Lectures and conferences to be arranged. 3 s.h.

Assistant Professor Bigelow
Prerequisites, Chemistry 5 or equivalent.
361-362. Chemical Thermodynamics.-A discussion of general chemical theory from the standpoint of thermodynamics. Three recitations. 6 s.h.

Offered in alternate years with Chemistry 363 . Professor Gross
363-364. Chemical Kinetics.-Theories of reaction velocity, catalysis, the theory of the solid state, the structure of atoms, the radiation theory. Offered in alternate years with Chemistry 361. 6 s.h.

Professor Gross
Prerequisite, Chemistry 6 or its equivalent.
365. Phase Rule.-A discussion of typical systems, isothermal curves, and space models. Three recitations. One semester-either fall or spring. 3 s.h. Assistant Professor Vosburgh

## DEPARTMENT OF ECONOMICS AND POLITICAL SCIENCE

## FOR SENIORS AND GRADUATES

203. Money and Banking.-After a preliminary study of monetary history and theory, together with an account of the development of credit instruments, there follows a more extended presentation of the theory and practice of banking. First semester. 3 s.h.

Professor Glasson and Mr. Ratchford
Students who elect this course must have made a creditable record in course 1.
235. Public Finance.-This course deals with public expenditures, public revenues, public debts, and financial administration. Second semester. 3 s.h.

Professor Glasson and Mr. Ratchford
Students who elect this course must have made a creditable record in course 1.
237. American Federal Finance.-A survey of the organization and methods of contemporary American federal finance with special attention to tariff revision, public debt administration, and budgetary procedure. First semester. 3 s.h. Assistant Professor Gray
[By special permission, Seniors may substitute course 237 for course 235]
238. Industrial and Financial History of the United States.-The development of American industrial and financial institutions and their economic and ideological backgrounds. Second semester. 3 s.h.

## Assistant Professor Gray

[By special permission, Seniors may substitute course 238 for course 203]
239. Statistical Methods.-Statistical analysis as a tool in investigation; its limitations, and the interpretation of statistical results. Methods especially applicable to economic data are given most attention. Two hours lecture and one laboratory period. First semester. 3 s.h.
[Not offered in 1930-31]
Assistant Professor Gray
240. Statistical Analysis of Time Series.-A study of so-called business "cycles" and "barometers" and the analysis of other periodic economic phenomena. Prerequisite, course 239. Two hours lecture and one laboratory period. Second semester. 3 s.h.
[Not offered in 1930-31] Assistant Professor Gray
254. Trade Unionism and Labor Problems.-Economic and industrial conditions that have given rise to unionism. A brief history of unionism in England and the United States. The structure, methods, and policies of modern unions. First semester. 3 s.h. Professor Cotton
[By special permission, Seniors may substitute course 254 for course 105]
255. Industrial Relations.-This course deals with the fundamental principles underlying industrial relations. Policies and plans of the management concerning employees are discussed. The class will study the organization of the labor department of various industries. Course 254 is a prerequisite for this course. Second semester. 3 s.h.

Professor Cotton
[By special permission, Seniors may substitute course 255 for course 158]
265. International Trade.-An analysis of the theoretical principles underlying international trade together with an historical study of the
foreign trade and tariff policies of the United States, France, Germany, and England down to 1914. First semester. 3 s.h.

Assistant Professor Roberts
266. Foreign Trade and Recent Commercial Policy.-A study of the influence on foreign trade of post-war protectionism, war debts, international capital movements, and inconvertible paper money. Practical problems in buying and selling abroad. Special attention given to Latin America. Second semester. 3 s.h. Assistant Professor Roberts
214. Economic Systems.-A study of alternative economic systems. In addition to an analysis of communism, anarchism and the variants of socialism, the course will include a consideration of other proposed modifications of the existing economic order. First semester. 3 s.h.

Professor Hoover
215. Economic Functions of the State.-A consideration of the primary and secondary economic functions of government and of the legislation which provides for the performance of these functions, such as social legislation and the regulation of commerce and industry. Second semester. 3 s.h.

Professor Hoover

## FOR GRADUATES AND SENIORS BY SPECIAL PERMISSION

210. History of Political Economy.-This course traces the development of economic theory, giving special attention to the various schools of economic thought in England, France, Germany, and the United States. A large amount of collateral reading in the works of typical authors is required. Lectures and class-discussions. 6 s.h.

Assistant Professor Roberts
312. Value and Distribution.-This course is designed to introduce students to some of the more complex aspects of economic theory. Controversial phases of theory are surveyed through the medium of the works of the foremost modern economists. The course will also serve as a general review of economic theory for graduate students. 4 s.h. Professor Hoover and Assistant Professor Roberts
349. Research in Corporation Organization and Finance.-Open to graduate students and, by special permission, to Seniors who have completed creditably courses 104 and 144. Second semester. 2 s.h.

Professor Glasson
275. Advanced Industrial Accounting and Management.-This course traces the ways and means of executive control through statistics and industrial accountancy. Emphasis is put upon the economics of overhead costs. A complete practice set of cost accounting is worked by each student during the course. 6 s.h. Professor Cotton

Courses 105 and 7 are ordinarily prerequisites for this course.

## FOR GRADUATES

331. Advanced Banking.-This course is open to students who have completed creditably Economics 1 and Economics $3^{a}$ or equivalent courses in other institutions. The subjects for study will be found in the history, theory, and contemporary functions of the banking systems in the United States, England, and France. First semester, T. 3:30-5:30. 2 s.h.

Professor Glasson

## POLITICAL SCIENCE

FOR SENIORS AND GRADUATES
228. American Political Institutions.-A study of the formation and development of the institutions of the national government in the United States. Federal organs of government are treated historically and analytically. 3 s.h.

Associate Professor Rankin
[Not offered in 1930-31]
225. American Political Parties and Practical Politics.-A study of the historical development, organization, and methods of political parties in the United States. Special attention is given to current American politics. First semester. 3 s.h. Associate Professor Rankin
226. Parliamentary Government.-This course, being a comparative study of popular government in modern states, deals particularly with the political systems of the British Empire, France, Germany, and Switzerland. Seeond semester. 3 s.h. Associate Professor Rankin
208. American Constitutional Law and Theory.-Attention is given to leading constitutional principles of American government, as developed through judicial interpretation. Emphasis is placed upon problems of current importance. Lectures, reading of cases, assigned legal problems. First semester. 3 s.h.

Professor Wilson
264. Railroad Regulation in the United States.-A brief consideration of the general problem of governmental regulation of railroads is followed by a more intensive study of the powers and activities of regulatory bodies, state and federal. The latter part of the course deals with an analysis of the Transportation Act of 1920 and its administration up to the present time. Second semester. 3 s.h. Professor Wilson
209. State Government in the United States.-The subject-matter covers the historical development of government in the states of the Union, the present political organization, and relations between state and federal government. First semester. 3 s.h. Associate Professor Rankin
294. City and County Government.-A study of the general problems of city government in the United States and in Europe. The latter part of the course is devoted to a study of county government in the United States, with particular reference to North Carolina. Seeond semester. 3 s.h.

Associate Professor Rankin
223. Political Thought to the Seventeenth Century.-In the course of a survey of political thought from the time of Plato and Aristotle to the seventeenth century, special emphasis is placed upon the development of important concepts in political theory. First semester. 3 s.h.

Professor Wilson
[Not offered in 1930-31]
224. Modern Political Theory.-The political theories of Hobbes, Locke, Rousseau, Montesquieu, Harrington, Burke, and John Stuart Mill are studied with particular reference to their influence upon American political thought. The latter part of the course deals with socialism and the modern idea of the state. Second semester. 3 s.h. Professor Wilson
[Not offered in 1930-31]
227. International Law and International Organization.-Elements of international law and the application of principles through recent judicial interpretation and in international negotiations. Particular attention is given to the manner in which the law has been interpreted and applied by the United States. The League of Nations and the Permanent Court of International Justice are studied in some detail. 6 s.h.

Professor Wilson
318. General Seminar in Economics and Political Science.-All graduate students with economics or political science as a major subject are members of this seminar. Reports of progress in research will be made, and there will be lectures and critical discussion by members of the department. T. at 7:30. 2 s.h.

Staff

## DEPARTMENT OF EDUCATION

## ELEMENTARY EDUCATION

FOR SENIORS AND GRADUATES
207. Technique of Teaching.-An advanced course in the teaching process, dealing with the theory underlying sound technique and applied specifically to the work of the elementary school. Prerequisite: teaching experience or six semester-hours of work in materials and methods. First semester. 3 s.h.

Associate Professor Carr
212. The Curriculum and Materials of the Elementary Grades.-A study of curriculum problems in the elementary school. First semester. 3 s.h. Associate Professor Carr
[Not offered in 1930-31]
222. Methods of Teaching and Supervising the Fundamental Subjects.-An advanced course for teachers in service and for students who have completed at least twelve semester-hours of work in education. Second semester. 3 s.h.

Associate Professor Carr
[Not offered in 1930-31]
232. Elementary School Supervision.-A survey of supervision as a means of improving instruction and adapting the curriculum to child and community needs. Second semester. 3 s.h. Associate Professor Carr

## EXPERIMENTAL EDUCATION AND EDUCATIONAL PSYCHOLOGY

206. Psychological Principles of Secondary Education.-A study of adolescence and the psychology of learning as applied to teaching the principal high school subjects. 3 s.h.

Professor Childs and Visiting Professor Troth
[Not offered in 1930-31]
209. Statistical Methods Applied to Education.-A study of statistical methods of treating educational and social data designed to enable teacher or administrator to interpret and use the results of scientific investigations in education. Second semester. 3 s.h.

Assistant Professor Dimmitt
[Not offered in 1930-31]
219. Experimental Education.-An introduction, including a brief historical survey of the field, to some of the most important problems and methods in experimental education. Experiments and reports in the general field of learning, the psychology of the school subjects, and related fields. First semester. 3 s.h. Professor Brownell
228. Psychology of Learning.-A study of methods of measuring and representing progress in learning, the conditions and factors influencing learning, individual differences, etc. Constant reference to experimental literature. First semester. 3 s.h.

## Assistant Professor Dimmitt

248. Investigations in Arithmetic.-An analytical survey of investigations in arithmetic with three purposes in view: (1) to examine the techniques employed with respect to their adequacy as means of solving the problems attacked; (2) to test the validity of the results announced and the value of these results for the teaching of arithmetic; (3) to locate further problems in arithmetic in need of scientific research. First semester. 3 s.h.

Professor Brownell

## FOR GRADUATES

318. Investigation of Study Problems.-A brief survey of the available literature on study, followed by extensive case-work in the study habits of high school and undergraduate college students. Diagnosis, corrective and remedial teaching in so far as possible, and reports. An introductory course in educational diagnosis and the treatment of individual differences. 3 s.h.

Professor
338. Investigations in Reading.-A summary of the results of the more important scientific studies in reading; interpretation of the results in terms of aims, methods, materials of instruction, testing, diagnosis, and supervision; emphasis of problems requiring further investigation. Prerequisite: nine semester-hours of Education. Second semester. $\mathbf{3}$ s.h.

Professor Brownell
348. Research in Arithmetic.-A course designed for students who have original problems in arithmetic which they desire to investigate. Such studies may be either individual or coöperative. Education 248 is advised as a preliminary course, but is not required. Second semester. 3 s.h.

Professor Brownell

## history and philosophy of education

FOR SENIORS AND GRADUATES
200. Introduction to the Philosophy of Education.-A consideration of fundamental concepts underlying educational theory. First semester. 3 s.h.

Professor Holton
[Not offered in 1930-31]
214. History of Education in the United States.-A study of the development of the American public school and the interaction of higher education and the public school. First semester. 3 s.h. Professor Holton
224. Current Problems in Public Education as Revealed Through School Surveys.-A study of recent developments in public education as revealed through school surveys and resulting from the survey movement. First semester. 3 s.h.

Professor Holton
[Not offered in 1930-31]
234. Recent Movements in American Education.-An intensive study of educational thought and practice since 1900. First semester. 3 s.h.
[Not offered in 1930-31]
Professor Holton
244. Studies in the Historical Development of Public School Administration. -An advanced course devoted to the development of public school administration in the South, with especial reference to North Carolina as a type. First semester. 3 s.h.

Professor Holton
[Not offered in 1930-31]
254. History of Secondary Education in the United States.-A study of historical and comparative conceptions of the secondary school, changes in American life affecting the secondary school, present status of the secondary school, current tendencies toward expansion, and the problem of state and federal aid. First semester. 3 s.h. Professor Proctor
[Not offered in 1930-31]

## PUBLIC SCHOOL ADMINISTRATION

213. Secondary School Organization and Administration.-A study of the outstanding problems of secondary school organization and administration other than the problem of gradation and classification of pupils. Second semester. 3 s.h.

Professor Proctor
233. Administrative Pupil Accounting.-An advanced study of gradation and classification of pupils, with incidental attention to the keeping of records and the making of reports. The study includes a consideration of individual differences, promotions, acceleration, and retardation of
pupils; the various plans for classification and gradation; interpreting the results of tests; and some practice in the computation of statistical measures. First semester. 3 s.h.

Professor Proctor
253. Legal Phases of School Administration.-A study of judicial decisions and the development of outstanding features of statute law controlling school administration, with special emphasis upon North Carolina materials. Second semester. 3 s.h. Professor Holton

## FOR GRADUATES

323. Public School Finance.-A study of educational costs, sources of revenue for the support of public education, collection of revenue, basis of distribution, and accounting for funds spent. Second semester. 3 s.h.

Professor Proctor
343. State and County School Administration.-A study of state and county organization of public schools, emphasizing underlying principles. First scmester. 3 s.h.

Professor Proctor
[Not offered in 1930-31]

## SECONDARY EDUCATION AND EDUCATIONAL SOCIOLOGY

 FOR SENIORS AND GRADUATES205. Sociological Foundations of the Secondary School Subjects.-A consideration of the aims and objectives of secondary school subjects, emphasizing practical problems of curriculum-making in the high school. Prerequisite: six semester-hours in education, including course 105. First semester. 3 s.h.

Professor Childs
215. Principles of Vocational Guidance.-A study of the objectives and underlying principles of vocational guidance, emphasizing this phase of education in North Carolina and the South. The study seeks to formulate a working program for vocational counsellors and others whose teaching function will involve problems of vocational and educational guidance. Prerequisite: six semester-hours in educational sociology, preferably courses 105 and 205. Second semester. 3 s.h.

Professor Childs
[Not offered in 1930-31]
225. Rural Sociology.-A study of rural life with emphasis upon the social and economic forces which apply to the life of the rural community. Second semester. 3 s.h. Professor Childs
[Not offered in 1930-31]
226. The Teaching of High School History.-Identical with History 212. The course counts as an elective in the Department of Education only when approved by the Department and the instructor. 6 s.h.

Associate Professor Shryock
235. Principles of Vocational Education.-A study of the social basis for vocational education; a brief review of the developments in the field up
to the present time; an examination of the present practices in the main fields of agricultural, commercial, industrial, and home-making vocational education. Second semester. 3 s.h.

Professor Childs
246. The Teaching of Mathematics.-Identical with Mathematics 204. The course counts as an elective in the Department of Education only when approved by the Department and the instructor. Second semester. 3 s.h.

Professor Rankin

## RESEARCH METHODS

## FOR GRADUATES

300. Methods of Educational Research: Seminar.-Graduate students are instructed in methods of research as applied to selected educational problems. Each student must select for intensive study and practice a subject in which he is interested. This course is recommended for all graduate student taking major work in Education. First semester. 3 s.h. Professor Proctor and Other Members of the Department

## DEPARTMENT OF ENGLISH

FOR SENIORS AND GRADUATES
201-202. Anglo-Saxon.-This course requires no previous study of Anglo-Saxon. The first semester is given to a study of Anglo-Saxon grammar and to the reading of Anglo-Saxon prose; the second semester, to the reading and interpretation of Beozeulf. 6 s.h. Professor Brown

203-204. Chaucer.-6 s.h.
Professor Baum
205-206. Middle English.-This course consists of an introduction to the study of early Middle English literature and of a study of the history of the English language. 6 s.h.

Professor Baum
Students may elect English 205-206 without having studied either Anglo-Saxon or Middle English.
[Not offered in 1930-31]
207-208. English Literature, 1400-1550.-6 s.h. Professor Baum
209-210. English Romances.-This course consists of a rapid reading of the chief romances of the Middle English period. 6 s.h.
[Not offered in 1930-31]
Professor Baum
211. English Literature, 1550-1625.-This course considers the most important non-dramatic literature from 1550 to 1625 except the works of Spenser. 3 s.h.

Professor Gilbert
212. English Literature, 1625-1660.—This course considers the most important works other than drama from 1625 to 1660 except the works of Milton. 3 s.h.

Professor Gilbert
213-214. The Ballad and Other Folk-Lore.-This course consists of an extensive study of the ballad and other ancient and modern folk-songs and of the other fifteen hinds of folk-lore as found in North Carolina
and other sections of America. Much of the material used in the course is in manuscript form, and still other material studied is that collected by the class during the year; thus the student gets training in collecting and classifying songs and other forms of folk-lore. Each student is assisted in developing some subject pertaining if possible to conditions in his native section. 6 s.h. Professor Brown

215-216. The Drama of the Elizabethan Period.-A study of the drama in England from its beginnings to 1640 . 6 s.h. Professor Gilbert

217-218. Spenser and Milton.-An exhaustive study of the works of Spenser and Milton.

Professor Gilbert
[Course 217 will be offered the second semester, 1930-31]
219. English Literature, 1660-1744.-3 s.h. Professor White
220. English Literature, 1744-1798.-3 s.h. Professor White
221. The Drama in England, 1640-1770.-3 s.h. Professor Baum
[Not offered in 1930-31]
223-224. Studies in the Romantic Poets of the Early Nineteenth Century.This course considers in an exhaustive manner the works of some of the Romantic poets. 6 s.h.

Professor White
225-226. Studies in Victorian Literature.-This course considers in an intensive way the works of some of the most important writers of the period. 6 s.h.

Professors Greene and Chase
227. Literary Criticism.-A history of literary criticism to 1700.3 s.h. Professor Gilbert
228. Literary Criticism.-A history of literary criticism from 1700 to the present. 3 s.h.

Professor Gilbert
229-230. American Literature.-This course considers in an exhaustive manner the works of some of the American writers. 6 s.h.

Professor Hubbell
231-232. The Teaching of Literature and Composition in the High School.This course is intended especially for those students who expect to teach in the high schools and for teachers in the city or county who desire instruction in the teaching of English. The work of the course includes consideration of methods and aims in the study of literature and the writing of English, the nature and values of the various kinds of literature, the planning of the high-school course, and the study of the most important English classics in the high school curriculum. 6 s.h.

Professor Gilbert
This course is also open to teachers with experience.
[Not offered in 1930-31]
FOR GRADUATES
301-302. Bibliography and Methods of Research.-M.W. 3-4:30. 6 s.h.
Professors Hubbell and Baum

This course or its equivalent is required of all candidates for higher degrees in English.

303-304. The Elizabethan Period.-This course considers in an exhaustive manner the works of some of the Elizabethan writers. 3 s.h. Professor Gilbert
[Not offered in 1930-31]
305-306. The Early Renaissance.-A seminar in the literature and language of the early Renaissance in England and Scotland. 3 s.h.
[Not offered in 1930-31] Professor Baum
307-308. American Literature.-A seminar in American literature. 6 s.h.
Professor Chase
309-310. Chaucer.-Special studies in the works and language of Chaucer; lectures, reports, and a thesis. One semester. 3 s.h.

Professor Baum

## DEPARTMENT OF GERMAN

FOR SENIORS AND GRADUATES
201-202. Goethe.-This course is intended to acquaint the student with the methods of independent research while making a careful study of the author's most important works, with special emphasis upon the broader aspects of his ever-widening interests and literary activities. 6 s.h.

Professor Krummel
203-204. Leibnitz to Romanticism.-Eighteenth century German literature in its relation to contemporary European philosophy. Lectures, collateral reading. 6 s.h. Professor Vollmer

205-206. Middle High German.-The language and literature of Germany's first classical period. Grammar and translation. First semester : Wright's Middle High German Primer, and Der arme Heinrich. Second semester: Das Nibelungenlied, Tristan und Isolde, or Parzival. 6 s.h. Professor Vollmer FOR GRADUATES
301-302. Gothic.-Phonology and morphology of Gothic as the basis of modern English and German. Reading of Ulfilas Gothic version of the Bible. 6 s.h.

Professor Vollmer
303-304. German Seminar.-A seminar will be conducted for properly qualified students.

Professor Vollmer

## DEPARTMENT OF GREEK

## FOR SENIORS AND GRADUATES

201-202. Greek Drama.-Selected plays are read, and their dramatic construction and distinctive features are discussed. 6 s.h.

Professor Peppler

203-204. Homer.-Odyssey. Pindar and Bacchylides.-6 s.h.
Professor Peppler
205-206. Greek Historians.-Herodotus, Books VII and VIII; Thucydides, Books VI and VII. 6 s.h.

Professor Peppler
207-208. Greek Orators.-Selected speeches. 6 s.h.
Professor Peppler
243. Greek Archaeology.-The topography and monuments of Athens are studied, and other matters supplementary to course 141-142 are presented. Course 243 is intended primarily for students who wish to prepare themselves for study in Greece or for work toward an advanced degree. Courses 105-106 (or its equivalent) and 141-142 are prerequisites. 3 s.h. Assistant Professor Johnson
244. Greek Epigraphy.-The history of the alphabet is studied, and important inscriptions are read for their content. Prerequisite, Greek 107-108 or its equivalent. 3 s.h. Assistant Professor Johnson

FOR GRADUATES
301-302. Seminar in Aristophanes.-The student is required to read the eleven comedies, to prepare an analysis of one play and discuss important literary and historical questions suggested by it, and to write a grammatical and exegetical commentary on a selected passage. Lectures on the history of Greek comedy and a study of some of the important extant fragments will accompany the work in Aristophanes. 6 s.h.

Professor Peppler
303-304. Seminar in the Greek Historians.-Similar to course 301-302 in that the student reads prescribed portions of Herodotus and Thucydides, analyzes one book of Thucydides, and prepares a commentary on a selected passage. 6 s.h.

Professor Peppler

## DEPARTMENT OF HISTORY

## AMERICAN HISTORY

FOR SENIORS AND GRADUATES
203. The Union, Confederacy, and Reconstruction.-Among the subjects considered are constitutional theories and sectional controversies, the rise of secession, the military strategy and conduct of the Civil War, constitutional and economic prchiems of the Union and Confederacy, and the political and economic adi.istments during reconstruction. First semester, M.W.F. at 12. 3 s.h.

Professor Boyd
[Not offered in 1930-31]
210. Constitutional History of the United States, 1763 to 1860.-Among the subjects considered are the issues and nature of the Revolution, the problems of the Confederation, the nature of the constitution in the light
of its early interpretations, the rise of political parties, sectionalism and its attendant political and economic interests, and the slavery controversy. 6 s.h.

Professor Boyd
[Not offered in 1930-31]
230. The History of North Carolina.-The evolution of the commonwealth from its origins to the present is traced with particular emphasis on social conditions and the recent period. Second semester, M.W.F. at 12. 3 s.h.

Professor Boyd
[Not offered in 1930-31]
231. The Hispanic-American Republics.-A survey of the political, economic, and social development of the Hispanic-American nations since the beginning of the movement for independence in 1810. Considerable attention is also given to the foreign commerce and foreign relations of these nations. First semester, M.W.F. at 9:30. 3 s.h.

Professor Rippy
232. The Hispanic Colonies of the New World.-The development of the Iberian states as colonizing powers, the work of the conquerors, the Spanish colonial policy and system, their influences and results, native races, the international contest for supremacy, and the decay of Spanish power in America and the Philippines. Second semester, M.W.F. at 9:30. 3 s.h.

Dr. Lanning
[Not offered in 1930-31]

## FOR GRADUATES

206. Southern History, 1763-1860.-The rôle of the South in American political and social development is traced with special reference to local conditions, state and regional. Among the topics emphasized are political ideals and political parties, southwestern expansion, cotton culture and slavery, local sectionalism, transportation, education, the churches, and the movement for secession. First semester, M.F. at 4-6. 4 s.h.

Professor Boyd
307. The Colonial Period, 1606-1763.-Emphasis is placed on certain typical institutional and social origins and the development of British policy toward the colonies. M. 4-6. 4 s.h. Professor Boyd
[Not offered in 1930-31]
315. Seminar in Southern History.-Selected topics in the development of the South Atlantic region, chosen from year to year, in different periods in its development. W. 4-5. 2 s.h.

Professor Boyd
321. Studies in the Diplomatic History of the United States.-A research course, open to students approved by the instructor. The aim is to give a familiarity with the sources and literature of South-American diplomatic relations and to investigate related topics in chosen fields from year to year. These fields are: (a) Independence movement of Latin America, (b) Latin-American Foreign Relations, (c) Sectionalism and American Foreign Relations. W. 4-6. 4 s.h.

Professor Rippy

## EUROPEAN HISTORY

## FOR SENIORS AND GRADUATES

204. English Constitutional History.-After a brief review of the AngloSaxon period a detailed study is made of those medieval institutions which form the basis of the British constitution. This is followed in the second semester by a general survey of the changes wrought in English political history during the seventeenth and eighteenth centuries, the main lines of constitutional development since 1800, and an outline of British government as it exists today. 6 s.h. Professor Laprade
[Not offered in 1930-31]
205. Europe Since 1870.-International relations since the Franco-German War is the chief subject of study in this course; special emphasis is placed upon the underlying economic and political influences. 6 s.h.

Associate Professor Carroll
218. The History of the European Proletariate.-This course is concerned chiefly with the origins, expansion, and organization of the industrial working classes of Europe. The following problems will be emphasized: the decline of serfdom, the growth of an urban working class, social revolutions in England, France, and Germany prior to the eighteenth century, the results of the Industrial Revolution, and labor movements and theories during the nineteenth and twentieth centuries. T.Th.S. at 9:30. 6 s.h.

Associate Professor Carroll
[Not offered in 1930-31]
222. Early Modern History.-A survey of the social and political changes in Western Europe during the fourteenth and fifteenth centuries, the Protestant Revolt and the Catholic Reaction of the sixteenth century, and the rise of toleration. T.Th.S. at 8:30. 6 s.h.

## Assistant Professor Nelson

[Not offered in 1930-31]
223. Medieval Institutions and Culture.-A consideration of the classical heritage, the Germanic infusion, the development of ecclesiastical, feudal, monarchical, and communal institutions, the relations of church and state, the use of universities, vernacular literature, philosophy and art, 300-1300 A.D. 6 s.h. Assistant Professor Nelson

## FOR GRADUATES

305. A Seminar in the History of England and the British Empire.-The work consists of practical training in the methods of historical research based on sources for modern British history. F. 7-8. 2 s.h.

## Professor Laprade

325. British Nationality and Public Opinion.-A study of the various political and social groups that have contended for the control of English politics and government since the sixteenth century, the methods by which they sought to exercise that control, and the resulting influence on national ideals. 4 s.h.

Professor Laprade
327. Modern Phases of the English Constitution.-A brief review of the medieval constitution, followed by a more intensive study of certain aspects of its development in the sixteenth, seventeenth, and eighteenth centuries. 4 s.h.

Professor Laprade
[Not offered in 1930-31]
328. Foundations of the British Empire. -The growth of the British trade and colonization in the sixteenth, seventeenth, and eighteenth centuries, including the causes in Great Britain of the American Revolution. $T$. 4-6. 4 s.h.

Professor Laprade
[Not offered in 1930-31]

## THE TEACHING OF HISTORY

FOR SENIORS AND GRADUATES
212. The Teaching of History and Civics.-The work in the first semester consists of a discussion of the question of aims and values in teaching history and civics, textbooks, programs of study, methods of instruction, the use of maps and pictures, and some consideration of the problems of teaching history in the elementary schools. The second semester is devoted chiefly to the making and presenting of lesson-plans for use in the high school, to making assignments, and to other problems of high school teaching. T.Th.S. at 12. 6 s.h. Associate Professor Shryock

## BIBLIOGRAPHY

FOR GRADUATES
326. Historiography and Bibliography.-A survey of the development of historical writing, and examination of the greater collections of historical scurces, and a consideration of the inter-relationship of history and other branches of social knowledge. 2 s.h.

Members of the Department
[Not offered in 1930-31]

## DEPARTMENT OF LATIN AND ROMAN STUDIES

## FOR SENIORS AND GRADUATES

201. Roman Fiction.-Petronius and Apuleius; the Milesian tale and its influence.
[Not offered in 1930-31]
202. Early Latin Christianity.-Readings in Tacitus, Pliny, Minucius Felix, and the church fathers.
[Not offered in 1930-31]
One of the two following year-courses 203-204 or 205-206 will be offered in 1930-31:

203-204. Epic Poetry.-Vergil: a study of the Greco-Roman epic, its development, significance, and influence. Throughout the year. 6 s.h. Assistant Professor Gates

205-206. Roman Dramatic Literature.-Select Comedies of Plautus and Terence; select Tragedies of Seneca. Rapid reading course. Throughout the year. 6 s.h.

Assistant Professor Gates
209-210. Vulgar Latin and Introduction to Romance Philology.-
[Not offered in 1930-31]
216. Roman Topography and Remains.-Lectures and reports. Second semester. 3 s.h.

Professor Rosborough
FOR GRADUATES
301-302. Roman Life.-
[Not offered in 1930-31]
309-310. Sight Reading and Composition.-
[Not offered in 1930-31]
311. Latin Inscriptions.-Introductory course in Latin Epigraphy with study of inscriptions for their linguistic, historical, and literary significance. First semester. 3 s.h.

Professor Rosborough
321-322. Seminar.-Training in criticism and research. In 1930-31 the work will probably be based on Plautus. Throughout the year. 6 s.h. Professor Anderson

325-326. Linguistics.-The forms and flexions of Latin and Greek; the development of the study of syntax among the Greeks; the historical syntax of Latin. Throughout the year. 6 s.h.

Professor Anderson

## 331-332. Roman Historical Literature.-

[Not offered in 1930-31]

## DEPARTMENT OF MATHEMATICS

All the courses listed will not be given every year. For a major in this department the required number of hours must be made up from a group of courses approved by the department and not selected at random. Graduate students are expected to have undergraduate credit for several of the courses listed below before they begin their program of graduate work.

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FOR SENIORS AND GRADUATES
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201. History of Mathematics.-This course deals with the evolution of the following topics: number system, arithmetic, geometry, algebra, trigonometry, analytical geometry, calculus, modern geometry. Brief sketches of the lives of the builders of mathematics will be given. 3 s.h.

Professor Rankin
Prerequisite, course 30.
204. Teaching of Mathematics.*-This course is designed primarily for those who intend to teach high school and college mathematics. It deals with the recent changes in methods of studying mathematics. 3 s.h.

Professor Rankin
Prerequisite, course 30.

[^38]225. Theory of Equations and Determinants.-3 s.h.

Assistant Professor Patterson
Prerequisite, course 25.
231. Differential Equations.-A study of the more common types of ordinary differential equations. Primarily a problem course for engineers. 3 s.h.

Professor Elliott
Prerequisite, course 30.
235. Modern Higher Algebra.-A study of linear dependence, solution of a set of linear equations. Study of matrices, linear transformations, invariants of linear transformations, bilinear forms. Either semester. 3 s.h. Assistant Professor Robison
Prerequisite, course 25.
239-240. Advanced Calculus.-This course is a study of the processes of the calculus, their meanings and applications. It is designed to furnish a necessary preparation for advanced work in analysis and applied mathematics. 6 s.h.

Professor Elliott
Prerequisite, course 30.
250. Modern Geometry.-Modern geometry of the triangle, transversals, harmonic sections, harmonic properties of the circle, inversions, poles, polars, etc. Valuable to teachers of high school geometry. 3 s.h.

Professor Rankin
Prerequisite, course 25.
255-256. Projective Geometry.-The elements of projective geometry treated synthetically. Introduction to homogeneous coördinates with application to projective geometry. Study of different types of collineations. 6 s.h.

Assistant Professor Robison
Prerequisite, course 25.
259-260. Analytic Geometry of Space.-The usual topics treated in cartesian and homogeneous coördinates. An introduction to differential geometry is included. 6 s.h.

Professor Elliott
Prerequisite, course 25.
275. Probability.-Introductory course. Combinatory analysis, mean values, Bernoulli's theorem, the probability integral, statistics. 3 s.h.

Assistant Professor Miles
Prerequisite, course 30.
276. Probability.-Continuation of course 275. Geometrical probability, probability of causes, theory of errors, applications. 3 s.h.

> Assistant Professor Miles
280. Fourier's Series and Spherical Harmonics.-The properties of Fourier's Series and spherical harmonics with application to problems of mathematical physics. Either semester. 3 s.h.

Assistant Professor Robison
Prerequisite, course 30 .
284. Vector Analysis.-This course is a study of the different vector products and the calculus of vectors, with applications to geometry and mechanics. 3 s.h.

Professor Elliott
Prerequisite, course 30.

## FOR GRADUATES

325. Functions of a Real Variable.-A study of some of the modern theories of integration, particularly those of Lebesgue, Stieltjes and Daniell. 6 s.h.

Assistant Professor Miles
Prerequisite, course 240.
330. Theory of Functions of a Complex Variable.-Study of analytic functions; conformal representation; the theory of infinite series and products with application to hyperbolic and Gamma functions; study of double-periodic functions. 6 s.h. Assistant Professor Robison

Prerequisite, course 240.
335. Infinite Series.-The theory of convergence and the algebraic and functional properties of series; special types of series; infinite products; divergent series. 6 s.h.

Assistant Professor Robison
Prerequisite, course 240.
340. Integral Equations.-A study of the Volterra and Fredholm integral equations with special reference to their application to boundary problems of differential equations. 6 s.h. Professor Elliott

Prerequisite, courses 230, 240.
342. Theory of Differential Equations.-Existence and nature of solutions of ordinary differential equations, algebraic theory of linear differential systems, boundary problems. 6 s.h.

Professor Elliott
Prerequisites, courses 230, 240.
345. Calculus of Variations.-This course will take up the study of the calculus of variations after the methods of Euler, Jacobi, Weierstrass, and Bolza. 6 s.h.

Assistant Professor Hickson
Prerequisite, course 240.
359. Differential Geometry.-An elementary course in differential geometry. A study of the differential geometry of curves, surfaces, and curves on surfaces. 6 s.h. Assistant Professor Hickson

Prerequisites, courses 230, 240.
355. Algebraic Geometry.-The general theory of algebraic curves with applications to cubic curves. Study of certain types of transformations. 3 s.h.

Assistant Professor Robison
Prerequisite, course 255.
375. Partial Differential Equations.-A study of some of the important types of differential equations of mathematical physics. 6 s.h.

Prerequisites, courses 230, 240.
Assistant Professor Miles
380. Potential Theory.-Newtonian and logarithmic potentials and their properties, Laplace's equation in potential theory and mathematical physics. 6 s.h.

Assistant Professor Miles

## DEPARTMENT OF PHILOSOPHY

Odd-numbered courses are offered in the first semester, even-numbered courses in the second semester.

## FOR SENIORS AND GRADUATES

203. The Philosophy of Conduct.-This course attempts a critical inquiry into the fundamental concepts and principles of human conduct. These are approached from the standpoint of nature, psychology, and philosophy. It analyzes the content of moral consciousness and seeks to find the laws that rule in the realm of virtue and finally to discover the ultimate nature of the right. Lectures and textbook. Text used: Everett's The World of Values. 3 s.h.

Professor Cranford
204. Christian Ethics.-This course attempts a critical inquiry into the fundamental concepts and principles of conduct in the light of Christianity. It seeks to show the practical application of these concepts and principles in a doctrine of Christian virtue and duties. Lectures and textbook. Text used: Smythe's Christian Ethics. 3 s.h.

Professor Cranford
205-206. Idealism.-A survey of idealistic systems of philosophy, with chief emphasis on the more recent developments in idealistic thinking. Lectures and assigned readings with reports. Prerequisite, Philosophy 101 or 102. 6 s.h.

Professor Cranford
208. A Constructive Survey of Modern Science.-An orientation course, designed to present a synthetic view of nature from the data of the modern sciences. It is aimed to be corrective of the tendencies toward over-specialization. Two lectures and one discussion hour. 3 s.h.

Assistant Professor Rhine
213-214. Philosophy of the Seventeenth Century.-The center of this course will be a detailed study of Spinoza's Ethics, but attention will be given to his contemporaries, Descartes and Leibnitz, and to the contrast between the rationalism of these thinkers and the empiricism of the British philosophers, Locke, Berkeley, and Hume. Lectures and reports. 6 s.h.

Professor Gilbert
215-216. History of Aesthetic.-The tracing of the historical solutions of traditional problems, such as the nature of imitation, symbolism, the ugly, the sublime, and the comic, the relation of art to nature, to morals, and to economics, the relation of the particular arts to each other, the standard of taste. General theories will be illustrated and tested by examples from the arts. Reading and discussion. 6 s.h.

Professor Gilbert
231. History of Ancient Philosophy.-The history of European philosophical speculation from its rise among the Greeks to the time of Proclus. Lectures, study of texts, reports. First semester, M.W.F. 10. 3 s.h.

Professor Widgery
[Not given in 1930-31]
232. History of Modern Philosophy.-The history of occidental philosophy from Descartes to the middle of the nineteenth century, with special reference to Descartes, Spinoza, Leibnitz, Hume, Berkeley, Kant, and Hegel. Lectures, study of texts, reports. Second semester, M.W.F. 10. 3 s.h.

Professor Widgery
[Not given in 1930-31]
233-234. Contemporary Philosophy.-A study of the leading philosophical movements in Europe and America in the last fifty years. Lectures, discussions, and reports. Throughout the year. M.W.F. 10. 6 s.h.

Professor Widgery
241. Comparative Ethics.-A comparative study of the ethics of the great culture systems and religions, including Egyptian, Babylonian, Greek and Roman, Hindu, Buddhist, Zoroastrian, Jain, Confucian, Sikh, Jewish, Moslem, and Christian. Lectures and reports. First semester, M.W.F. 11. 3 s.h.

Professor Widgery
242. Aesthetics.-An analytic consideration of the beautiful, of aesthetic appreciation and artistic creation, with reference to classical periods in the history of art. Lectures, discussions, reports. Second semester, M.W.F. 11. 3 s.h.

Professor Widgery
[Not given in 1930-31]
252. The Philosophy of History.-An enquiry into the logic and methodology of the knowledge of history, and into the metaphysical implications of history. Lectures, discussions, reports. Second semester, M.W.F. 11. 3 s.h.

Professor Widgery
261-262. The Philosophy of Religion.-A critical consideration of the data of empirical religion and the constructive development of a modern philosophy of religion. Prerequisite, SR $10^{a}$ or $\operatorname{SR} 2^{a}$ or $\operatorname{SR} 2^{b}$. Lectures, discussions, reports. 6 s.h.

Professor Widgery
FOR GRADUATES
301-302. Seminar in Philosophy.-For the discussion of special problems, chiefly metaphysical. Two hours a week throughout the year. Time to be arranged. 4 s.h.

Professor Widgery

## DEPARTMENT OF PHYSICS

## FOR SENIORS AND GRADUATES

The following courses are arranged primarily for senior students, but they are open to graduate students. An elementary knowledge of the calculus and credit for 12 semester-hours in Physics is presumed in all of the following courses.

201-202. Principles of Radio Transmission and Reception.-A course covering the general theory of wave propagation and including a study of inductance, capacity, induction coils, oscillatory discharge, high frequency generators and transformers, and the various methods of detecting electromagnetic waves. 6 s.h.

Assistant Professor Collins

203-204. Analytical Mechanics.-Geometry of motion; kinematics of a particle and of a rigid body; statics, kinetics, of a particle and of a rigid body; relative motion; Lagrange's equations; general principles of mechanics. M.W.F. at 9:30. 6 s.h. Assistant Professor Collins
205. Physical Optics.-This course is a treatment of the subject of light adapted to the needs of students completing general physics and is of special interest to chemical and pre-medical students. The course is based on Taylor's Advanced Optics. First semester, M.W.F. at 12. 3 s.h.

Professor Hatley
206. Modern Physics.-A lecture course consisting of a rapid review of the entire field of physics with special emphasis on the outstanding experiments underlying modern physics. Second semester, M.W.F. at 12. 3 s.h.

Professor Hatley
207-208. Electricity and Magnetism.-This course covers the fundamental phenomena of direct and alternating currents and magnetism. Starling's Electricity and Magnetism is used as the basis of the lectures. Smith's Electrical Measurements is used as a guide in the laboratory exercises. Two lectures and one laboratory period a week, throughout the year. 6 s.h.

Professor Edwards
[Under special conditions a credit of either 2 or 4 semester-hours may be arranged.]
209. Thermodynamics.-Thermodynamics is the science on which is based all of the physico-chemical sciences. This introductory course deals with basic principles freed from all unnecessary complications. Hence it covers neither the theory applied to heat engines nor, in detail, the theory of chemical equilibrium. It is in a sense preparatory to such studies. First semester, M.W.F. at 8:30. 3 s.h. Professor Edwards

FOR GRADUATES
301-302. Advanced Physical Laboratory.-Mechanics, heat, radiation, electrical measurements, ionization, and radio activity. This course involves exact measurements in all the fields indicated. Classical experiments are repeated by much the same methods as were employed by the original investigators. Two laboratory periods per week. 2-6 s.h.

Professors Edwards and Hatley, Assistant Professors Collins and Nielsen
304. Kinetic Theory of Gases.-Fundamental ideas of equations of state, laws of gases, Maxwell's distribution law, equipartition law, viscosity, diffusion, thermal conductivity, and specific heats. Second semester. 3 s.h.

Professor
205-206. Theoretical Physics.-This is an advanced course in general physics covering the elementary mathematical theory of mechanics, electrodynamics, hydrodynamics, thermodynamics, etc. A knowledge of the calculus is presumed and it is desirable that a student take concurrently Differential Equations, M.W.Th.F. at 8:30. 8 s.h.

Assistant Professor Nielsen

Professor Hatley
309. Conduction of Electricity Through Gases.-Electron theory of gaseous conduction. First semester. 3 s.h. Professor Edwards
312. Spectroscopy.-A laboratory course interspersed with occasional lectures dealing with standard practice in spectroscopy. Second semester, M.W.F. at 8:30. 3 s.h.

Professor Edwards
313-314. Thermionic Vacuum Tubes and Radio-Frequency Measurements.A laboratory course in radio measurements. Course 201-202 is a prerequisite of this course. 6 s.h. Assistant Professor Collins

315-316. Quantum Theory.-Application of the quantum theory to pho-to-electricity, resonance and ionization potentials, X-rays, radioactivity, spectral lines and fine structure, Stark and Zeeman effects, thermal radiation, and specific heats. Three lectures per week. Prerequisite, Theoretical Physics. 6 s.h.

Assistant Professor Nielsen
317. Electron Theory.-This course deals with such phases as the charge and mass of the electron, scattering of high speed charged particles by thin foils of matter, isotopes, atomic disintegration, nuclear and atomic structure, radiation, and ionization potentials. First semester. 3 s.h.

Professor Hatley
320. X-rays.-The properties of X-rays are interpreted in terms of the interaction between radiation and electrons. An effort is made to gain from a study of available X-ray data a better understanding of the structure of the atom and of the nature of X-rays themselves. Second semester. 3 s.h.

Professor Hatley

## DEPARTMENT OF PSYCHOLOGY

FOR SENIORS AND GRADUATES
201. Social Psychology.-Lectures, readings, and reports. First semester, M.W.F. 3 s.h.

Professor McDougall
202. Abnormal Psychology.-Lectures, readings, and reports. Second semester, M.W.F. 3 s.h.

Professor MicDougall
203. Advanced Experimental Psychology.-A laboratory course designed to give first-hand acquaintance with experimental technique and methodology. First semester, M.W.F. Six laboratory hours. 3 s.h.

Assistant Professor Zener
209. Experimental Psychology: Problems and Theories.-An historical survey of experimental psychology, with a critical study of selected problems and theories. First semester, M.W.F. 3 s.h.

Assistant Professor Zener
204. Physiological Psychology: Nerve Conduction and Reflex Action.-A consideration of the functional properties of the nervous system. Two hours lecture, six hours laboratory. Second semester, M.W.F. 4 s.h.

Assistant Professor Zener
[Not offered in 1930-31]
206. Physiological Psychology: Development of Structure.-A study of the structure and function of the central nervous system from the embryological and comparative viewpoints. Two hours lecture, six hours laboratory. Second semester, M.W.F. 4 s.h.

Assistant Professor Zener
[Not offered in 1930-31]
220. Advanced Psychology of Religion.-See Religious Education.

Professor Hickman
219. Introduction to the Psychology of Religion.-See Religious Education.

Professor Hickman
224. A Constructive Survey of Modern Science.-See Philosophy.

Assistant Professor Rhine

## FOR GRADUATES

300. Seminar in Advanced Psychology.-Seminar on special problems. Two-hour session twice a week. Second semester.

Professor McDougall

## DEPARTMENT OF RELIGION*

NEW TESTAMENT
FOR SENIORS AND GRADUATES
213-214. The Beginnings of Christianity.-A survey course dealing with the background, the beginnings, and the early history of Christianity. Special attention is given to the creation of the literature of the New Testament. M.W.F. at 9:30. 6 s.h. Professor Branscomb
217. The New Testament in Greek.-Rapid reading in Greek text of the New Testament. Prerequisite, six semester-hours study of the Greek language. T.Th.S. at 9:30. 3 s.h.

Professor Branscomb
218. The Exegesis of Selected Books of the New Testament.-The books studied will be Galatians, Colossians, and Hebrews. The course will be based on the Greek text. T.Th.S. at 9:30. 3 s.h. Professor Russell
219. Life of Paul.-A study of Paul's life on the basis of Acts and the epistles. Consideration is given to Paul as a man, the factors entering into his character, and his permanent contribution to the world. 3 s.h.

Professor Myers
[Not offered in 1930-31]

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FOR GRADUATES
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311. The Life and Teachings of Jesus.-Prerequisite, New Testament 213. Th.F.S. at 11. 3 s.h.

Professor Branscomb

[^39]312. New Testament Theology.-The teaching of the books of the New Testament in their historical development. Prerequisite, New Testament 311. M.T.W. at 11.

Professor Russell
313. The Exegesis of Selected Books of the New Testament.-The books studied will be I Corinthians, II Timothy, I Peter, and selections from the Apocalypse of John. The study will be based on the Greek text. Prerequisite, New Testament 217, or its equivalent. Th.F.S. at 11. 3 s.h.

Professor Russell
314. The Exegesis of Selected Books of the New Testament.-The books studied will be Romans, James, and the First Epistle of John. The study will be based on the English text. Prerequisite, New Testament 213214, or its equivalent. Th.F.S. at 11. 3 s.h. Professor Branscomb
315. Judaism at the Beginning of the Christian Era.-A study of Judaism from the time of Ben Sirach to the writing of the Mishna. Prerequisite, New Testament 213-214, or its equivalent. Th.F.S. at 11. 3 s.h. Professor Branscomb
[Not offered in 1930-31]
316. Hellenistic Religions at the Beginning of the Christian Era.-Prerequisite, New Testament 213-214. Th.F.S. at 11. 3 s.h.

Professor Russell
[Not offered in 1930-31]

## OLD TESTAMENT

## FOR SENIORS AND GRADUATES

201-202. Introductory Hebrew.-A study in the Hebrew language. The reading of the first eight chapters of Genesis inductively. T.Th.S. at 8:30. 6 s.h.

Professor Godbey
203-204. Introduction to the Old Testament.-The origin, literary form and contents of the books of the Old Testament in their historical setting. M.W.F. at 8:30. 6 s.h.

Professor Russell

## FOR GRADUATES

301. Old Testament Theology.-The religious and ethical teachings of the books of the Old Testament in their historical development. Prerequisite, Old Testament 203-204. M.T.W. at 11. 3 s.h.

## Professor Russell

302. The Exegesis of Selected Books of the Old Testament.-The books to be studied will be chosen from the following list: Job, Second Isaiah, Zechariah, the Psalms. The study will be based on the English text. Th.F.S. at 11. 3 s.h.

Professor Russell
305-306. Pre-Mosaic Hebrew Religion.-Its historical portrayal in the Old Testament. Prolegomena to the study of Old Testament history and literature. No knowledge of Greek required. M.W.F. at 12. 6 s.h.

307-308. The Old Testament in Hebrew.-Parts of the pentateuch are read during the first semester. Selections from the prophets are the basis for the study in the second semester. Prerequisite, Old Testament 201-202 or equivalent. Th.F.S. at 12. 6 s.h. Professor Godbey

309-310. Ancient Oriental History.-The aim of this course is to show the relations of Minoan, Philistine, Ancient Egyptian, and Assyro-Babylonian history and literature to the Old Testament and to the early history of the Hebrews. M.T.W. at 8:30. 6 s.h. Professor Godbey

## Christian doctrine

## FOR GRADUATES

321. Introduction to the Science of Theology.-A consideration of theology as a branch of science and an indication of some of the results obtained through the use of the scientific method in theological investigation. M.W.F. at 8:30. 3 s.h.

Professor Rowe
322. The Content of Christian Doctrine.-A comprehensive survey of the leading doctrines of Christianity in the light of religious thought and experience of the present age. M.W.F. at 8:30. 3 s.h.

Professor Rowe
323. Theology in Ancient and Medieval Christianity.-The history of Christian thought from the Greek Fathers to the Scholastics with special attention to the ecumenical creeds. M.T.W. at 9:30. 3 s.h.

Professor Rowe
324. Theology in Modern Christianity.-The history of Christian thought from the beginning of the Reformation to the present time. M.T.W. at 9:30. 3 s.h.

Professor Rowe
325. Soteriology.-A study of the Christian doctrine of salvation and a comparison of the various ways by which the saving power of God is thought to take effect in personal and social life. M.T.W. at 9:30. 3 s.h.

Professor Rowe
[Not offered in 1930-31]
326. Eschatology.-A study of "the last things" in the light of the Christian hope for the individual and for society with special emphasis upon personal immortality. M.T.W. at 9:30. 3 s.h.

Professor Rowe
[Not offered in 1930-31]

## history of religion and missions

FOR SENIORS AND GRADUATES
281. The Nature and Early Development of Religion.-Introduction to the early history of religion, the beliefs and practices of the more primitive peoples, and the religious life of the ancient world. T.Th.S. at 9:30. 3 s.h.

Professor Cannon
282. Living Religions of the World.-A survey of the religious systems of India, China, and Japan, followed by a study of Judaism, Mohammedanism, and Christianity, the object being to trace the historical development of each religion. T.Th.S. at 9:30. 3 s.h.

Professor Cannon
283. Expansion of Christianity.-Apostolic missions, conquest of the Roman Empire, winning of northern Europe, the modern missionary era, status of missionary work in important areas, social aspects of missions, missionary biography. T.Th.S. at 11. 3 s.h.

Professor Cannon
284. Principles of Missions.-The great missionary agencies, their foundation and growth; creation and cultivation of the missionary spirit at the home base; training and work of the pastor; principles and practice of missionary education; organization of the local congregation for its missionary tasks. M.T.W. at 11. 3 s.h.

Professor Cannon

## FOR GRADUATES

381. Leading Ideas of Religion.-The idea of God and the doctrine of $\sin$ and salvation in the religions of the world. Prequisite, History of Religion and Missions 281 or 282. M.W.F. at 9:30. 3 s.h.

Professor Cannon
382. Leading Ideas of Religion.-The conception of the future life and ethical ideals and practice in the religions of the world. Prerequisite, History of Religion and Missions 281 or 282. M.W.F. at 9:30. 3 .sh. Professor Cannon
383. Buddhism.-India at the rise of Buddhism. Life of the Buddha and the teachings of early Buddhism. Development into the Hinayana and Mahayana schools, its spread and present condition in southern and eastern Asia. Prerequisite, History of Religion and Missions 282. M.W.F. at 9:30. 3 s.h.

Professor Cannon
[Not offered in 1930-31]
384. Mohammedanism.-The life of Mohammed and the religion of Islam, special attention being given to the Koran and its teaching. The aim is to interpret Mohammedanism as a force today. Prerequisite, History of Religion and Missions 282. M.W.F. at 9:30. 3 s.h.

## Professor Cannon

[Not offered in 1930-31]
385. Christianity and World Movements.-Relation of Christianity to significant world movements, race, war, industry, world peace. T.Th.S. at 11. 3 s.b.

Professor Cannon
[Not offered in 1930-31]
386. Missionary Problems.-Needs of particular fields, types of work, relations of older and younger churches, nationalist movements, qualifications and training of candidates, education and other selected problems. Prerequisite, History of Religion and Missions 283 or 284. T.Th.S. at 11. 3 s.h.

Professor Cannon
[Not offered in 1930-31]

## CHURCH HISTORY

FOR SENIORS AND GRADUATES
233. Church History to the Reformation.-A survey of the growth of the Christian Church from the Apostolic Age to the Reformation. M.W.F. at 11. 3 s.h. Professor Garber
234. History of the Evangelical Movement.-Beginning with the Lutheran Reformation, this course traces the rise, growth, influence, and history to 1800 of the Calvinistic, Anglican, Reformed, Quaker, Baptist, and Methodist movements. M.W.F. at 11. 3 s.h. Professor Garber

FOR GRADUATES
333. The Denominations in America: the Colonial Period.-A study of the transfer of the various denominations to the English colonies, and their problems to the Revolutionary War. Prerequisite, Church History 233234. M.W.F. at 9:30. 3 s.h.

Professor Garber
334. The Denominations in America: the National Period.-Major emphasis is placed upon relations of church and state, steps toward Christian unity, the small sects, the Young People's Movement, Christian education and modern theological issues. Prerequisite, Church History 233-234. M.W.F. at 9:30. 3 s.h.

Professor Garber
335. Methodism.-A study of the beginnings and growth of the Methodist societies in England, of early Methodism in America, and of the development of the several branches of the Methodist church in America, and distinctive principles of Methodism. Prerequisite, Church History 233-234. M.T.W. at 12. 3 s.h.

Professor Garber
336. Great Men of the Christian Church.-A study of outstanding individuals who have in different ways influenced the thought and program of the Christian Church. The life, work, and contributions of about twenty representative Christian leaders. Prerequisite, Church History 233-234. M.T.W. at 12. 3 s.h.

Professor Garber
337. Protestantism and Catholicism in Europe since 1800.—A comprehensive study of the religious situation in Europe in modern times, emphasizing the papacy in the age of nationalism; relations of church and state; German theology of the nineteenth century; and the Oxford movement. Prerequisite, Church History 233-234. M.T.W. at 12. 3 s.h. Professor Garber
[Not offered in 1930-31]

## religious education

## FOR SENIORS AND GRADUATES

261. Administration and Supervision of Religious Education.-Deals with problems of administering and supervising the religious education program of the local church. Designed especially to train ministers and other administrative leaders in religious education. Methods of correlation and integration are considered. T.Th.S. at 12. 3 s.h.
262. Surveys, Tests, and Measurements.-Study of the methods of getting the facts in religious education. Consideration of underlying principles, techniques, and available materials. Special attention to procedure in a local church. T.Th.S. at 12. 3 s.h.

Professor
265. Curriculum of Religious Education.--Study of various theories of the curriculum of religious education, conception of the curriculum as enriched and controlled experience, analysis of existing curricula and critical evaluation of same. M.W.F. at 8:30. 3 s.h. Professor Spence
[Not offered in 1930-31]
267. Religious Education in the Community.-This course considers the larger relations of religious education to public education and other community agencies, and also the need, organization, program, and types of week-day religious education and the vacation church school. M.W.F. at 8:30. 3 s.h.

Professor Spence
268. Materials of Character Education.-A study of the Bible and other great religious literature for their contributions to character formation at each given stage of character development. Special emphasis on story material and modern religious poetry. M.W.F. at 8:30. 3 s.h.

Professor Spence
269. Principles and Program of Character Education.-Theory and methcds of character education. Study of experiments made in this field. While primary consideration is given character building in religious education, the development of character education in the public schools will also be carefully surveyed. T.Th.S. at 8:30. 3 s.h.

## Professor

270. Religious Education in the Home.-Deals with special problems in connection with making the home an effective religious educational agency. Study of family relationships, worship habits, attitudes, and ideals. Coöperation of the home with other agencies in the moral and religious development of the child. T.Th.S. at 8:30. 3 s.h.

## Professor

271. Research in Religious Education.-For advanced students and especially those majoring in religious education. Offers direction in the use of various techniques and methods for both field and library investigations. (All professors in the department are available for special counsel.) T.Th.S. at 12. 3 s.h.

Professor
272. Philosophy of Religious Education.-For advanced students interested in problems growing out of the philosophical implications of religious education. Critical examination of various theories and principles underlying modern procedure in religious education. Prerequisite, Religious Education 261. T.Th.S. at 12. 3 s.h.

Professor
273. Curriculum Construction.-This course deals with the processes of research, construction, and experimentation used in curriculum making. Actual curriculum construction will be undertaken. M.W.F. at 8:30. 3 s.h.

Professor Spence
[Not offered in 1930-31]
275. Introduction to the Psychology of Religion.-Study of the major factors of religious experience, together with conditions bearing upon its genesis and growth. T.Th.S. at 8:30. 3 s.h. Professor Hickman
276. Advanced Psychology of Religion.-Psychological study of such problems as worship, prayer, and various types of belief. Some attention to special problems. Prerequisite, Religious Education 275 or its equivalent. T.Th.S. at 8:30. 3 s.h.

Professor Hickman

## FOR GRADUATES

371. The Religious Experience of the Child.-A psychological study of the developing religious experience of childhood, involving a consideration of the principles of genetic psychology. Prerequisite, one course in general psychology. M.T.W. at 11. 3 s.h. Professor Hickman
372. The Religious Experience of Youth.-(Continues the study begun in Religious Education 371 and is along the same lines.) Prerequisite, one course in general psychology. M.T.W. at 11. 3 s.h.

Professor Hickman
373. The Psychology of Mysticism.-A brief historical review of the principal phases of mysticism in religion, followed by a psychological analysis to estimate the abiding worth of mysticism in religious experience. Prerequisite, Religious Education 275 or equivalent. M.W.F. at 11. 3 s.h.

Professor Hickman
[Not offered in 1930-31]

## hOMILETICS AND PRACTICAL THEOLOGY

FOR SENIORS AND GRADUATES
251. The Church and Rural Sociology.-A study of the religious, social, educational, and economic conditions of the country; the historical development of the church in the midst of rural social relations; an attempt to discover the present social obligation of the church. T.Th.S. at 8:30. 3 s.h.

Professor Ormond
252. Rural Church Administration.-This course will deal with the functions of the rural church; the minister's attitude toward rural life, his mission to the rural people, as well as his service in managing the organization of and supervising the church program. T.Th.S. at 8:30. 3 s.h.

Professor Ormond
FOR GRADUATES
343. Psychology of Preaching.-A psychological study of the preaching motive, the relation of the preacher to his congregation, and the relation of the preacher to society in general. T.Th.S. at 9:30. $\mathbf{3}$ s.h.

Professor Hickman
[Not offered in 1930-31]
344. History of Preaching.-An historical study of the development of Christian preaching from the apostolic period to the present time. Em-
phasis is laid upon the personality and the homiletical methods of great preachers, studied in their true historical perspective. T.Th.S. at 9:30. 3 s.h.

Professor Hickman
[Not offered in 1930-31]

# DEPARTMENT OF ROMANCE LANGUAGES 

FOR SENIORS AND GRADUATES

215-216. The Modern French Novel.-A survey from Madam de Lafayette to Paul Bourget with particular reference to the effect of literary movements upon the evolution of novel technique. 6 s.h.

Professor Jordan
217-218. The French Language.-French phonetics, composition, dictation, conversation, lectures in French. 6 s.h. Professor Webe
219. Old French.-An introduction to the Old French language and literature. Brief study of Old French grammar; the Chanson de Roland; lectures. 3 s.h.

Professor Cowper
220. Old French.-Types of Old French literature. Reading of typical Romans d'adventure, lectures. 3 s.h. Professor Cowper

221. Rousseau and the Beginnings of Romanticism.- 3 s.h.<br>Professor Cowper<br>[Not offered when Old French is given]

FOR GRADUATES
French 223-224.-A study of the literary and critical theories underlying the movements of realism and naturalism. Representative authors of the period $1850-90$ are read, and individual problems are assigned, mainly in the field of the novel. 6 s.h.

Professor Jordan

## DEPARTMENT OF SOCIOLOGY

FOR SENIORS AND GRADUATES
205. Social Pathology.-A study of the causes, extent, significance, and constructive treatment of the principal forms of pathology in modern society: Poverty, physical defectiveness, malnutrition, feeble-mindedness, insanity, undirected leisure activities, and unstandardized commercial recreation, alcoholism, prostitution, vagrancy, and delinquency. First semester, M.W.F. at 11. 3 s.h. Professor Ellwood
206. Criminology.-Prerequisite, course 1. A study of the original tendencies of man and the problem of socializing these tendencies; the relation of physical and mental defectiveness and untoward influences in the home and neighborhood to crime; the development of criminological theory and procedure, emphasizing penal and reform methods, and especially modern methods of social treatment and prevention of crime. Second semester, M.W.F. at 11. 3 s.h. Professor Ellwood
212. Child Welfare.-A study of heredity and environment as factors in personality development ; infant conservation; welfare responsibilities of the school, emphasizing the physical and mental well-being of the child, play, and compulsory and industrial education ; child labor, diagnosis and treatment of delinquency; care of the dependent and neglected child; child-caring agencies, public and private; and a community program of child welfare. 3 s.h.
[Not offered in 1930-31]
213. Constructive Social Policies.-An intensive study of the theories and legislation dealing with such problems as compensation, vocational re-education, and other methods of social insurance and social improvement. 2 s.h.
[Not offered in 1930-31]
215. Rural Sociology.-A study of social conditions in rural communities and their improvement. Definite rural social problems are studied such as the drift to the cities, farming as an occupation, land problems, farm labor problems, coöperation, the rural school, the rural church, rural health and sanitation, the rural home, the social center. $\mathbf{3}$ s.h.
[Not offered in 1930-31]
216. Urban Sociology.-A study of the organization and social problems of urban communities, with special reference to social technology or the improvement of social and living conditions. The following subjects are treated: Municipal administration, city planning, housing, public health and sanitation, public safety, justice, welfare and leisure-time activities, and civic art. 3 s.h.
[Not offered in 1930-31]
217. General Anthropology.-A study of the origin and evolution of man as an animal and of the different races of mankind. The prehistoric human types, the principles of ethnology, and the characteristics of the Negro, Mongolian, American, and Caucasian races. Lectures and assigned reading. 3 s.h.
[Not offered in 1930-31]
218. Cultural Anthropology.-A study of social origins and of the earliest stages of cultural evolution; the stone and metal ages; the origins of industry, language, magic, religion, morals, science, art, and social organization in the family, horde, clan, and tribe. Lectures and assigned reading. 3 s.h.
[Not offered in 1930-31]
227. Emigration and Immigration.-A study of territorial movements of population with especial reference to Europe and America. Causes and extent of migration; its effect upon American and European society; origin and characteristics of immigrant groups and their organization in the New World; problems, agencies and processes of assimilation. 2 s.h.
[Not offered in 1930-31]
219. Principles of Sociology.-A critical study of sociological theory. The sociological theories of recent writers will be critically examined with a view to laying the foundation for a constructive theory of the social life in modern biology and psychology. Discussions and papers by the class. First semester, T.Th.S. at 11. 3 s.h.

Professor Ellwood
220. History of Social Philosophy.-Lectures on the development of social thought from Aristotle to the present; the social philosophies of Plato, Aristotle, St. Augustine, Thomas Aquinas, Machiavelli, Bodin, Hobbes, Locke, Vico, Montesquieu, Rousseau, Condorcet, and the sociological systems of Comte, Spencer, Shaeffle, Lilienfeldt, Gumplowicz, Ratzenhofer, and Ward, will, among others, be considered. A large amount of assigned reading will be required in this course. The student is advised to correlate this course with related courses in economics, history, political science, and philosophy. Second semester, T.Th.S. at 11. 3 s.h.

Professor Ellwood
222. Methods of Social Research.-A study of the various methods of research and investigation that can be applied to the study of social phenomena. Considerable time is given to the study of social statistics and the social survey. Special problems are assigned for research and field work. 3 s.h.
[Not offered in 1930-31]

FOR GRADUATES
330. Seminar.-Research work upon special problems in sociology and social work. One hour session each week. 2 s.h.

Professor Elliwood

## THE SUMMER SCHOOL

The Duke University Summer School is divided into two terms of six weeks each. Many courses giving graduate credit are offered by members of the University Faculty and by visiting professors. A bulletin containing information regarding the graduate courses to be offered during the summer of 1930 may be obtained by addressing the Director of the Summer School, Duke University, Durham, N. C. Summer school graduate students who desire to be admitted as candidates for advanced degrees should make application to the Dean of the Graduate School and furnish official transcripts of the work done for the bachelor's degree. Such application may be made by correspondence, or in person during the first week of each summer term.

# FEES AND OTHER EXPENSES 

## GENERAL FEES

All fees for each semester are due and payable, unless otherwise specified, at the time of registration at the beginning of that semester, and no student is admitted to classes until his fees have been paid. Graduate students are required to pay the following fees:
Matriculation, per semester ..... $\$ 25.00$
Tuition, per semester ..... 75.00
*Room rent, per semester ..... 75.00
Library fee, per semester ..... 5.00
Athletic fee, admitting students to all athletic contests held on the University grounds, per semester ..... 5.00
$\dagger$ Damage fee, payable annually at the September registration ..... 1.00
Medical fee, payable each semester ..... 2.00
Commencement fee, payable once by graduate students, in the last semester before a degree is conferred ..... 3.00
Diploma fee, payable by candidates for degrees in the second semester ..... 5.00

## SPECIAL FEES

Graduate students who are permitted to write a thesis for the master's degree while not in actual residence at the University are charged a fee of $\$ 12.00$ for supervision of thesis work by a member of the faculty.

Graduate students in the sciences are required to pay the special laboratory fees for courses as fixed by the various departments.

## TRANSCRIPTS

A student desiring to transfer from Duke University to another institution is entitled to one transcript of his record. A charge of one dollar is made for each additional copy.

[^40]
## TEACHERS TAKING GRADUATE COURSES

Teachers in near-by schools taking one or two courses in the University are required to pay one registration fee of $\$ 5.00$ for each academic year and a tuition fee of $\$ 2.00$ per semesterhour of credit, together with any regular laboratory or other fees collected from students taking the courses. Fees due under this special provision for teachers are payable at the beginning of the first semester. Instructors and graduate assistants in the University may be included under this provision provided they are not receiving more than one-half credit for residence in meeting the requirements for an advanced degree. Graduate assistants receiving more than one-half credit will pay the regular fees, except that the tuition fee will be reduced to an amount proportionate to the credit allowed for residence.

## PAYMENTS TO FELLOWS AND SCHOLARS

Payments by the University of stipends to fellows and scholars are made in four installments, on November 25, January 25, March 25, and May 25. Fellows and scholars are required to pay the regular tuition fee and such additional fees as are ordinarily required of graduate students.

## ROOMS AND CONDITIONS OF RENTING THEM

The itemized statement in the general table of expenses includes the care of rooms, in which everything essential in the way of furniture is provided. All rooms are supplied with heat, water, and electric light. Each student furnishes his own blankets, sheets, pillow-slips, towels, and pillows.

Rooms are reserved only for students who have been officially accepted by the University. They are rented for no shorter period than one semester. A room deposit of $\$ 5.00$ is required of each applicant for admission. This fee is deducted from the room charges at the time of registration for the fall semester. The reservation fee will be refunded to any applicant not accepted by the University provided the official receipt for the fee, given to all paying it, is presented either in person or by letter to the treasurer's office, but students who make application and are accepted will not be entitled to have the reservation fee refunded unless the request is made by or before August 1 .

An old student who wishes to retain his room for the succeeding year must notify the treasurer's office on or before May 15. All rooms which have not been signed for on or before May 15 will be considered vacant for the succeeding year. Unless a deposit of $\$ 5.00$ for each proposed occupant, in part payment of rent, is made by August 1 reservations are cancelled and the University is free to rent the room to other students. When a room is once engaged by a student, no change will be permitted except with the consent of the treasurer. Leaving one room and occupying another without permission is strictly against the rule and will render the offender liable to charge for both rooms for the entire semester. No occupant is permitted to rent or sublet a room to another occupant. The University does not assume the responsibility of selecting and assigning room-mates, though it will gladly render any assistance possible in the matter.

## DORMITORIES FOR MEN

On the west campus there are three groups of dormitories, each group forming a quadrangle enclosing a court. For the present these groups of dormitories are designated as $\mathrm{A}, \mathrm{B}$, and C. They contain ample rooming quarters for all the men students. One or more sections will be reserved for the use of students of the Graduate School of Arts and Sciences.

## DORMITORY ROOMS FOR GRADUATE WOMEN

Four new dormitories built especially for women and newly and attractively furnished will be opened in September, 1930. In each hall, serving as a center for the social life of the hall, are a large living-room, and three small reception rooms. The students' rooms are single, double, or arranged in suites of two rooms for two, three, or four students and are supplied with all necessary furnishings except towels, sheets, pillow-slips, blankets, and heavy bed coverings. All undergraduates from out of town are expected to live in the dormitories and no student under twenty-one is permitted to live outside of the dormitories unless with near relatives. Special arrangement may be made with the Dean by an older woman who wishes to live in town. Graduate students will be welcomed in the dormitories and
special regulations will be made for their convenience. Heads of the halls, with the coöperation of the Student Council, have general charge of the social life of the halls. Connected with the dormitories by arcades is the Union, which includes dining rooms for students and faculty, a lounge, and other rooms for various student activities.

## BOARDING ACCOMMODATIONS

Beginning with the academic year 1930-31 the University will open its dining hall in the Union on the west campus with accommodations sufficient to provide in a superior way for all resident men students. It is the policy of the University to furnish board to its students at actual cost. Charges for board will not exceed $\$ 25.00$ per month.

The Union is the logical center of student activities for men and it will be found desirable for male students to board in its supervised halls. In the Union are located the University Post Office, the University Store, the University Barber Shop, and all publication staff offices.

In addition to the Union dining halls a Coffee Shop will be operated for the convenience of students and visitors.

## MEDICAL CARE

The University Physician, Dr. Joseph A. Speed, who maintains offices on the University campus, has general charge of the health of the students. Ample, first-class provision is made in the hospital of the Medical School of the University for caring for all sick students. Any student too ill to attend his college classes is taken to the hospital.

## ESTIMATED EXPENSES FOR AN ACADEMIC YEAR

The necessary expenses of a graduate student are moderate ; the University dormitories provide thoroughly comfortable and wholesome living conditions at a minimum cost, while all charges made by the University have been kept low. Incidental expenses naturally depend upon the tastes and habits of the individual. The following table gives the necessary college expenses for one year:

|  | Low | moderate | liberal |
| :---: | :---: | :---: | :---: |
| Tuition | . $\$ 150.00$ | \$150.00 | \$150.00 |
| Matriculation | 50.00 | 50.00 | 50.00 |
| Room-Rent | 100.00 | 125.00 | 150.00 |
| Board | 225.00 | 225.00 | 225.00 |
| Laundry | 20.00 | 25.00 | 30.00 |
| Books | 22.50 | 30.00 | 45.00 |
| Commencement Fee | 3.00 | 3.00 | 3.00 |
| Library Fee | 10.00 | 10.00 | 10.00 |
| Athletic Fee | 10.00 | 10.00 | 10.00 |
| Damage Fee | 1.00 | 1.00 | 1.00 |
| Medical Fee | 4.00 | 4.00 | 4.00 |
| Total | . $\$ 595.50$ | \$633.00 | \$678.00 |

## ADVANCED DEGREES CONFERRED, JUNE 5, 1929

*Allen, Gay Wilson
Anderson, Ewing
Andrews, Robert Lee
Blake, Nelson Morehouse
Blalock, Sallie Verona
Britton, George Taylor
Broadway, Blanche McKinsey
Burch, James Charlie Horton
Carpenter, Clarence Ray
Carroll, Zoe Wells
Cheatham, Cora Lee
*Clark, Blanche Henry
Croy, Oakley Easley
Cunningham, Marcus Earl
Dehler, Sophie Anne
Ehrlich, John
Elliott, Emmet Roach
Fanning, Frederick Deveau
Garrison, Roy Charles
Glasson, Lucy Pleming
Grigg, Claud
Haddock, Richard Abraham
*Hall, James Henry
Harriss, Hyman LeRoy
Ide, Walter Swetland
Jenkins, Wilbert Armonde
Johnson, Daniel Sloan
Kellam, William Porter
Ketring, Ruth Anna

MASTER OF ARTS

Kirkpatrick, Charles Atkinson
Kolb, Ernest Connors
Little, Lawrence Calvin

Wiese, Marion Bernice
Wrenn, Samuel Nathaniel

MASTER OF EDUCATION
Dunn, Ione Henderson
Nunn, Lilian Via
*Edgerton, Roland Ottis
Whaley, Otis
Forman, Eleanor Brynberg

## DOCTOR OF PHILOSOPHY

Allen, Ivey, Jr., A.B., Duke.
Dissertation: Investigation of Isoquinoline Alkaloids: The Proposed Fritsch-Pomeranz Synthesis of Papaverine.

Davis, Rose May, A.B., A.M., Duke.
Dissertation: Investigation of Isoquinoline Alkaloids: Examination of Pictet's Berberine Synthesis.

Flanders, Ralph Betts, A.B., Emory; A.M., Duke.
Dissertation: Plantation Slavery in the State of Georgia.
Kumro, Donald Milheim, B.S., The University of Buffalo; A.M., The University of Illinois.
Dissertation: The Possibility of Non-Toxic Lead Compounds.
Lackey, Oscar Napoleon, A.B., Valparaiso University; A.M., Duke.
Dissertation: Voltaic Cells with Oxidation-Reduction Electrodes.

[^41]
# LIST OF GRADUATE STUDENTS <br> 1929-1930 

[Note: This list includes the names of all persons registered as graduate students during the twelve months preceding Commencement Day, June, 1930. The symbol ( S ) indicates that the student took part or all of his graduate courses in the Summer Session of 1929.]

Abernathy, Ethel Fuquay Springs, N. C.
A.B. (Duke), German.

Aiken, Leonora Marshall
A.B. (Duke), French. (S)

Akerstrom, Frances Elizabeth
A.B. (Maryville), Education, English. (S)

Alberson, Hazel Stewart
A.B. (Monmouth), Latin. (S)

Alexander, Thomas Robert
Durham, N. C.
McLeansville, N. C.
Asheville, N. C.
Pineville, N. C.
A.B. (Davidson), B.D. (Union, Richmond), Economics, Political Science.
*Altvater, Frederick Vernon Denver, Colo.
A.B. (Duke), Economics.

Anderson, Alice Francis
Burlington, N. C.
A.B. (Duke), Education. (S')

Anderson, Dorothy Henderson
Durham, N. C.
A.B. (University of Tennessee), Psychology.

Anderson, Elizabeth Holt
Durham, N. C.
A.B., A.M. (Duke), German. (S)

Anderson, Ewing Gainesville, Fla.
A.B. (University of Florida), A.M. (Duke), English.

Anderson, Mildred Everett Durham, N. C.
A.B. (Marygrove), Psychology.

Ashburn, Karl Everett
Handley, Tex.
A.B., A.M. (Texas Christian University), Economics.

Ashford, Moselle Quillian
Athens, Ga.
A.B. (Florida State College for Women), A.M. (Clark), Psychology.

Ashley, George Norman Edenton, N. C.
A.B. (Wake Forest), Religion.

Atkins, Blanche Geneva
Durham, N. C.
A.B. (Duke), English, Education.

Baker, Sudie Mae
A.B. (Duke), Education. (S)

Balch, Clifford Perry
Holly Springs, N. C.
A.B. (Franklin and Marshall), History, Political Science.

Baldwin, Evelyn Grayson
Durham, N. C.
A.B. (Mary Ealdwin), English, French.

Barker, Felix Scott
Durham, N. C.
A.B. (Duke), Education. (S')

Barnes, Zelda Ralston
Clayton, N. C.
A.B. (Greensboro College for Women), Education. (心)

Barnette, Elizabeth
Roxboro, N. C.
A.B. (Duke), English. (S)

Barnhardt, Zeb Glenn
A.B. (Duke), Physics. (S)

[^42]Barnhart, Frank Melton
A.B. (Emory and Henry), Religion, History.

Barrett, Dixon
A.B. (Duke), Education. (S)

Basler, Roy Prentice A.B. (Central, Misscuri), English.

Bayne, Hazel Mae A.B. (George Washington), English. (S)

Beasley, Blair Edward A.B. (Duke), Education, English. (S')

Beavers, Hallie A.B. (North Carolina College for Women), Education.

Bell, Lila McLin C. Graham, N. C.

Bennett, John Wesley $\quad$ Concord, N. C. A.B. (Duke), Religion. (S)

Best, Albert Hartwell, Jr. A.B. (Wofford), Education, Economics. (S)

Bird, Matthew John A.B. (Duke), History, Education. (S)

Bizzell, Alma Bridgers A.B. (Salem), Education.

Blake, Nelson Morehouse

Crimora, Va.
Durham, N. C.
Calhoun, Ky.
Washington, D. C.
Apex, N. C.
Siler City, N. C.
Graham, N. C.

Florence, S. C.
Chelsea, Mass.
Louisburg, N. C.
Hyattsville, Md.
A.B. (George Washington), A.M.. (Duke), History.
A.B. (Duke), Religion.

Boyd, Robert Edwin Fountain, N. C. A.B. (University of North Carolina), Education. (S)

Bradford, Cathryne Monroe, N. C. B.S. (William and Mary), Education, History. (S)

Bradshaw, Lucille Farrer Rocky Mount, N. C. B.S. (Virginia State Teachers College, Farmville): Education. (S)

Brady, Elbert Carl Elon College, N. C. A.B. (Elon), German. (S)

Brant, George Ezekiel Bethune, S. C. A.B. (University of South Carolina), Mathematics. (S)

Brant, Helen Ward Bethune, S. C. A.B. (Coker), Economics, Education. (S')

Braswell, Helen Green Nashville, N. C. A.B. (North Carolina College for Women), Education. (S)

Braswell, John William
Demopolis, Ala. A.B. (Duke), English.

Brecher, Gerhard Karl Adolf Otto Dresden, Germany (Gymnasium, Dresden), (University of Hamburg), Botany, Zoölogy.
Brent, Fred Whaley
A.B. (Duke), Mathematics, History. (S)

Brewer, Ann Eliza A.B. (Meredith), A.M. (Columbia).

Brinson, Pearl Leola A.B. (Duke), French. (S)

Broadway, Blanche McKenzie A.B. (Duke), History.

Brothers, Joe Jurden A.B. (Duke), Education. (S)

Brown, Adrian Ernul
A.B. (Duke), Religion.

Brown, Maurine
Lynchburg, Va.
Raleigh, N. C.
Morehead City, N. C.
Durham, N. C.
Elizabeth City, N. C.
Bynum, N. C.
Cleburne, Tex. A.B. (Baylor University), Education. (S')

Browning, Henry Donaldson
A.B. (Wake Forest), Education. (S)

Brummitt, Fred Graham
A.B. (Duke), Education. (S)
deBruyne, Jacob Marinus Anton
A.B. (Duke), Chemistry, Physics.

Buckner, Caney Edward A.B., A.M. (Duke), History. (S)

Burch, James Charlie Horton
A.B., A.MI. (Duke), English, German, French.

Byrd, Ruth White
A.B. (North Carolina College for Women), English. (S')

Caldwell, Lawrence McClure
A.B. (Wake Forest), Zoölogy. (S)
$\dagger$ Calhoun, Catherine Truss
A.B. (University of Richmond), Botany. (S)

Callihan, Alfred Dixon
A.B. (Marshall), Physics, Mathematics, Chemistry.

Canaday, Ernest Franklin Carrollton, Mo.
A.B. (William Jewell), A.M. (University of Missouri), Mathematics. (S)

Carpenter, David Williams Durham, N. C.
A.B., A.M. (Duke), Chemistry, Physics, Mathematics.

Carpenter, Edna May
Durham, N. C.
A.B. (Duke). Education, English.

Carpenter, Virginia Magnolia
A.B. (Duke), Education. (S)

Carroll, Annie Lucille
A.B. (Salem), Education. (S)

Carroll, Charles Fisher, Jr.
A.B. (Duke). Education. (S)

Carroll, James Elwood
A.B. (High Point), Religion.

Carroll, James Grover Wake Forest, N. C.
A.B. (Wake Forest), M.A. (Columbia), Mathematics. ( S )

Carroll, Zoe Wells Morristown, Tenn.
A.B. (University of Tennessee), A.M. (Duke), Zoollogy, Psychology.

Caudill, Russell Horton
Durham, N. C.
A.B., A.M. (Duke), Religion. (S)

Chen, William Yuanlung
A.B., A.M. (Syracuse), Psychology, Philosophy.

Cherry, Jane Estelle Newton, N. C.
A.B. (Greensboro College), History, Education. (S)

Cherry, Julia Wyche Allen Bahama, N. C.
A.B. (Duke). Education. (S)

Cherry, William John, Jr.
Rock Hill, S. C.
A.B. (Presbyterian College of South Carolina), English.

Chesley, Leon Carey
B.S. (Susquehanna), Zoölogy, Botany, Chemistry.
Clark, Helen Dearmin High Point, N. C.
A.B. (Randolph-Macon), Religion, Philosophy.

Clark, Thomas Dionysius
Louisville, Miss.
A.B. (University of Mississippi), A.M. (University of Kentuckv), History.

Clarkson, John Montgomery
Heinemann, S. C.
A.B. (Wofford), A.․․ (Duke), Mathematics. (S)

Clifton, Robert Marston
B.S. (Davidson), Etrgiish, History.

[^43]Coleman, Thomas Rupert
A.B. (Duke), Religion. (S)

Conley, Donald Hayes
A.B. (Duke), economics, History. (S)

Cook, Cecil Edwards
A.B. (North Carolina State College), Education. (S)

Cooke, Lucy Gay
Graham, N. C.
A.B. (North Carolina College for Women), Italian.

Cousar, Virginia Lancaster, S. C.
A.B. (Erskine), Economics, Education. (S)

Cowan, Sara Louise
Rutherford, N. C.
A.B. (North Carolina College for Women), Education. (S)

Cox, Granville Claude Fairfax, Va.
A.B. (William and Mary), Education, Mathematics. (S)

Cox, Henry Miot
Toccoa, Ga.
B.S. (Emory), Mathematics, Physics.

Cox, Rufus Carson Troy, N. C.
A.M. (University of North Carolina), Education. (S')

Cox, Virginia Faye
A.B. (Converse), English.

Craig, J. Marie
A.B. (Winthrop), B.S. (Columbia), Education. (S)

Cross, Lethia Elizabeth
A.B. (Duke), Education. (S)

Cude, Wendell Holmes
A.B. (Guilford), Education, English. (S)

Currin, Gladys Gill
A.B. (Meredith), Education. (S')

Curtis, Ruth Evelyn
A.B. (Greensboro College), History, English.

Cutter, Walter Aurey
A.B. (Central, Missouri), Religion, Philosophy.

Dail, Clara Jamesey
A.B. (North Carolina College for Women), Education, Mathematics. (S)

Daniels, Archie Shields
A.B. (Duke), Education. (S)

Daves, Guy
A.B. (Wake Forest), Education. (S)

Daves, Juanita Koontz A.B. (North Carolina College for Women), Education. (S)

Davidson, Elizabeth Huey
Shelbyville, Tenn.
B.S., M.S. (University of Tennessee), History, German. (S)

Davies, Clyde Thomson Radcliffe, Va.
A.B. (University of Florida), Education, English. (S)

Davis, Alberta Louise Zebulon, N. C.
A.B. (Greensboro Collcge), Education. (S)

Dean, Charles Wesley, Jr.
Kingsport, Tenn.
A.B. (Emory and Henry), Mathematics, Education. (S)

Deaton, Mary Moore Mooresville, N. C.
B.S. (North Carolina College for Women), Education.

Denny, Mary Rebecca
A.B. (Salem), English, Education. (S)

Dickson, Dorothy Gene
A.B. (Rice Institute), Education. (S)

Dimmette, Joel Walter
A.B. (Duke), Religion. (S)

Doob, Leonard William
A.B. (Dartmouth), Psychology, Zoölogy.

Red Springs, N. C.
Raleigh, N. C.
Leasburg, N. C.
New York, N. Y.

Drake, Virginia Helen Grand Rapits, O.
Dressel, Francis George Hart, Mich.
A.B. (Michigan State), M.S. (University of Michica:!, Mithemntics.

Dunkle, Margaret Robert Bartow, Fla.
A.B. (Florida State College for Women), Latin, Greek.

Dunn, Maud Wilkerson Durham, N. C.
A.B. (Duke), Education. (S)

Dunn, Millard Charles Bahama, N. C.
A.B. (Duke), Chemistry. (S)

Edgerton, Roland Ottis
A.B. Ed.M. (Duke), Education. (S')

Edwards, Nancy Irene
A.B. (Meredith), Education. (S)

Eggers, Graydon Poe
A.B. (Carson-Newman), English, French. (S)

Elliott, Emmet Roach
Portsmouth, Va.
Mars Hill, N. C.
Boone, N. C.
B.S. (Hampden-Sidney), A.M. (Duke), Mathematics. (S')

Elmore, Kelly Lee
Lowell, N. C.
A.B. (Duke), Chemistry.

Fanning, Mamie Johnson
A.B. (Duke), Education. (S')

Fennell, Richard Adams
Durham, N. C.
A.B. (Birminglam-Southern), Biology, Zoölogy.

Ferrell, George Washington
Decatur, Ala.
A.B. (Duke), A.M. (Columbia), English, Psychology.

Ferry, Lois Anne Riverside, Calif. A.B. (University of California), German.

Fewell, Hall Steels Charleston, S. C.
A.B. (Presbyterian College of South Carolina), Education. (S)

Fisher, Hilbert Adam
Raleigh, N. C.
Graduate of U. S. Naval Academy, M.S. (North Carolina State College), Mathematics. (S)
Ford, Grover Mancil Hokes Bluff, Ala. B.S. (Davidson), M.S. (Emory), Chemistry, Physics.

Fort, Elbert William Lumber Bridge, N. C. A.B. (Guilford), Education, Religious Education. (S')

Frazier, Rose Marie Durham, N. C. A.B. (Duke), German.

Fry, Glenn Ansel A.B. (Davidson), Psychology, Zoölogy.

Garner, George Lee A. \& M. College, Miss.
A.B. (Mississippi State College for Women), History, English. (S)

Garrard, Annie Walker
Durham, N. C.
A.B. (Duke), History, Education.

Garrison, Albert L.
A.B. (Asbury College), Education. (S)

Gathings, James Anderson
Big Stone Gap, Va.
A.B. (Furman), Political Science, History. (S')

Gelmann, Herman Henry
Brooklyn, N. Y. B.S. (Fordham), A.M. (Stanford), Chemistry, Physics.

Gentry, Nola Jane
A.B. (Duke), English. (S)

Gibson, William Marion
Greeneville, Tenn.
Baltimore, Md.
A.B. (University of Richmond), Political Science. History.
Charleston, W. Va.
Gilbert, William Solomon
A.B., A.M. (University of Kentucky), History (S)

Gill, Harriet Aurelia
A.E. (University of Richmond), Zoölogy. (S)

Gill, Leila May
A.B. (Converse), Education, Latin (S)

Gillaspie, Athey Graves
B.S. (Lynchburg), Chemistry, Physics.

Gillet, Lucille Erma
A.B. (Nebraska Wesleyan), Psychology.

Gillock, Emmie May
A.B. (Mississippi State College for Women), Mathematics, Physics.

Glasson, Lucy Pleming Durham, N. C. A.B., A.M. (Duke), English. (S)

Godard, James McFate Kankakee, Ill. A.B. (Park), Education, Psychology.

Goodwin, Ernest Boyd Durham, N. C.
A.B. (Wofford), A.M. (University of North Carolina), History. (S)

Gordan, Myron Wilcox, Jr.
A.B. (Furman), Education. (S)

Gray, Theron Arthur
A.B. (Duke), History, Education. (S)

Green, Ernest Joshua
A.B. (Duke), English. (S')

Greene, Fred Woodside
A.B. (Duke), Biology. (S)

Gregory, George McKendrick Durham, N. C. A.B. (Yale), A.M. (University of Texas), English.

Griffin, Mabel Jeannette Durham, N. C.
A.B. (Duke), Mathematics, Physics. (S)

Grigg, Ivey Franklin
Berea, N. C. A.B. (Duke), Education, Religious Education. (S')

Grogan, Eleanor Stoneville, N. C.
A.B. (North Carolina College for Women), Education, English. (S)

Gunter, Ellen Mae
A.B. (Duke), English.

Haddock, Richard Abraham
A.B., A.M. (Duke), Mathematics. (S)

Hagan, Charles Banner
Durham, N. C.
Durham, N. C.
A.B. (Emory and Henry), A.M. (University of Virginia), Political Science, Economics.
Hall, Joseph Alfred Durham, N. C. A.B., M.S. (Wisconsin), Chemistry.

Haltiwanger, Robert Sidney
B.S'. (Davidson), Education. (S)

Hardaway, Elizabeth Annie Durham, N. C. A.B. (Duke), Education. (S)

Harmon, Thomas Leonhardt
Macon, Ga. A.B. (Emory), A.M. (University of Chicago), Economics, Education.

Harrell, Stanley Claudius Durham, N. C. A.B., A.M. (Elon), P.D. (Union, Richmond), Religion.

Harris, Clarence Ligon Anniston, Ala. A.B. (Wofford), Zoöl ss. (S)

Harris, Florence Catherine Washington, N. C. A.B. (Duke), History.

Harton, Benjamin Love Conway, Ark. A.B. (Hendrix), Education, Economics, Pyschology.

Harvill, Richard Anderson
Magnolia, Miss. B.S. (Mississippi A. and M.), A.M. (Duke), Economics.

Harward, Morata Beatrice
A.B. (Duke), English. (S)

Hatchett, Edward Wallace
A.B. (Duke), Mathematics. (S')

Haywood, Zoa Lee
A.B. (Duke), English, Religion.

Hazlewood, Lucy Linwood
A.B. (Randolph-Macon Woman's College), Education, Mathematics. (S)

Hazlewood, Willie Gertrude
A.B. (Randolph-Macon Woman's College), English. (S)

Henderson, Pierce Pike
Asheville, N. C
A.B. (Presbyterian College of South Carolina), Education, Mathematics. (S)

Henry, Nell Quinby
A.B. (Lander), Biology. (S')

Henry, Sibyl
A.B. (University of North Carolina), Education. (S)

Herndon, Clyde
A.B. (Furman), Education, History. (S)

Hester, Ernest Carrington
A.B. (Duke), Zoölogy, Botany.

Hewlett, Betty Herring
A.B. (Meredith), Education. (S)

Highfill, Thomas Guthrie
A.B (Moravian), Religion.

Hinson, Van Glenn
A.B. (Lenoir-Rhyne), Education. (S)

Hitt, Pearl
A.B. (Lander), Education, English. (S)

Hoban, Charles Francis
Ph.B. (Dickinson), English.
*Hobgood, Virginia Lucile
A.B. (Duke), Latin, French.

Hocutt, Naomi Hull
A.B. (Meredith), Education. (S)

Hodges, Wiley Edward
A.B. (Roanoke), Political Science, History.

Hodgkin, Wilbur Leroy
A.B. (Davidson), Education. (S)

Holt, Isaac Terry
A.B. (Duke), History, Political S'cience.

Holton, Samuel Martin
A.B., A.M. (Duke), Education. (S)

Hook, Marshall Ward
Winnsboro, La.
Lenoir, N. C.
Ehrhardt, S. C.
Durham, N. C.
Wilmington, N. C.
Donnaha, N. C.
Boone, N. C.
Clinton, S. C.
Harrisburg, Pa.
Durham, N. C.
Ashton, N. C.
Blountville, Tenn.
Greensboro, N. C.
Erwin, N. C.
Durham, N. C.
Elon College, N. C.
A.B. (Elon), M.A. (University of North Carolina), Mathematics. (S)

House, Ray Weldon
A.B. (Duke), Education. (S)

Howell, Thelma
A.B. (Duke), Zoölogy. (S)

Huckabee, Ellen Harris
A.B. (Duke), English.

Hudson, Monie Sanders
A.B. (Wofford), Chemistry, Physics.

Huff, Pauline
A.B. (Meredith), Education. (S)

Huffistetler, Juanita Elizabeth
A.B. (Florida State College for Women), Economics, History. (S)

[^44]Hunt, Dwight Russell
A.B. (Southeastern Teacher's College, Oklahoma). Religion.

Hunt, Norman Francis
A.B. (University of Pennsylvania), History.

Hunter, Annie May
Danville, Va.
A.B. (North Carolina College for Women), Educition.

Hunter, John Everett Stem, N. C. AB. (Wake. Forest), Education. (S)
Israel, Kate Ola
A.B. (Duke), Chemistry.

Jackson, David Kelly, Jr.
A. B. (Duke), English, Education.

Jenkins, Sanford Swindell
A.B., A.M. (Duke), Chemistry, Physics.

Jenkins, Theodore Roosevelt
A.B. (Duke), Religious Education. (S)

Jennings, Frances Wardlaw A.B. (Brenau), Zoölogy, Education. (S)

Jeter, Paul Hamilton, Jr. A.B. (University of South Carolina), Education. (SS)

Johnson, Joseph Herman A.B. (University of Richmond), Education. (S)

Jordan, Patte
Mount Airy, N. C. A.B. (North Carolina College for Women), Education. (S)

Keever, Homer Maxwell A.B. (Duke), Religion.

Ketring, Ruth Anna A.B. (Earlham), A.M. (Duke), History.

Kimball, Rosebud A.b. (Elon). Education. (S)

Kimbrough, Edith
A.B. (Bessie Tift), Education, English.

Kluttz, Lillie Mae A.B. (Duke), Education. (S)

Knight, John Vincent A.B. (Elon), Religion, English. (S')

Knight, Mary Latham
A.B. (Duke), Education. (S)

Kressin, Virginia Stanton
A.B. (University of South Dakota), Latin. (S)

Larsen, Edith
A.B. (Duke), Zöllogy. (S)

Leary, Rupert Leslie
A.B. (Furman), Education, English. (S)

Ledbetter, Frances Gresham
A.B. (Duke), English. (S)

Lee, Albert Evans
A.B. (Mercer), Education. (S)

Lee, Robert Earl
B.S., LL.B., M.A. (Columbia), Economics, History. (S')

Leggett, Mary Margaret
Edenton, N. C. A.B. (Randolph-Macon Woman's College), Education. (S)

LeGwin, Mary McCullen
A.B. (Duke), English. (S)
$\dagger$ Leonard, Susan Francena A.M. (Columbia), Botany. (S)

[^45]Levenson, Jacob
B.S. (New York), Chemistry, Physics.

Little, Harold Clay
A.B. (Davidson), Education, Mathematics. (S)

Little, Lawrence Calvin
A. P (Davidson) AM. (Date)

Long, Albert Anderson Durham, N. C.
A.B. (University of North Carolina), Education, Religion. (S)

Lovelace, Arsola Crawford Caroleen, N. C.
A.B. (Wake Forest), Education. (S)

Lowder, Essie B.
B.S. (Queens), Zoölogy, Botany.
*Lucas, John Paul, Jr.
A.B. (Duke), Psychology, Religion, Zoölogy.

Lumley, Victor Alton
A.B. (Duke), French, English. (S)

Lynn, Irene Margaret A.B. (Duke), Zoölogy, Chemistry. (S)

McCarson, Anna Murray
A.B. (Duke), Education. (S)

McCaskill, Leona Wilson
A.B. (Winthrop), Latin, Greek.

McCollum, Doris Elizabeth
A.B. (Winthrop), Education. (S)

McCulloch, Thomas Logan
A.B. (Whittier), Psychology, Zoölogy.

McDonald, Agnes Mae
A.E. (Salem), Mathematics, Education. (S')

McDonald, Claudia Anne A.B. (Duke), Education. (S)

McDonald, Ralph Waldo A.B. (Hendrix), A.M. (Duke), Education. (S)

McEwen, Noble Ralph Irondale, Ala. A.B. (Birmingham-Southern), Education, Political Science.
†MacGowan, William Leroy A.B. (Harvard), Botany. (S)

McKinnon, Sallie Lou A.B. (Randolph-Macon), English.
Mc.Millan, Montague A.B. (Limestone), A.M. (George Washington), English.

Mabry, William Alexander A.B., A.MI. (Duke), A.M. (Harvard), History.

Maden, William Leroy
A.B. (Tusculum), Spanish. (S)

Major, Charles Leslie A.B., A.M. (William and Mary), Education, Economics, Psychology.

Manchester, Alan Krebs
A.B. (Yanderbilt), A.M. (Columbia), History.

Maness, Madison Ward Rowland, N. C. A.B. (Duke), Education. (S')

Mann, John William
A.B. (Virginia Military Institute), Englizh.

Manning, John Eber B.S., M.S. (University of Arkansas), Education. (S)

Mansfield, Mamie Durham, N. C. A.B. (Duke), Education, Philosophy.

[^46]Ponomics, Psychology.
Porto Allegre, Brazil
New York, N. Y.
Charlotte, N. C.
Durham, N. C.
Durham, N. C.

Albemarle, N. C.
Charlotte, N. C.
Durham, N. C.
Morrisville, N. C.
Durham, N. C.
Sumter, S. C.
Sumter, S. C.
Fullerton, Calif.
Paragould, Ark.
Lillington, N . C .
Winston-Salem, N. C.

Jacksonville, Fla.
Maxton, N. C.
Marion, S. C.
Ridgeway, N. C.
Jonesboro, Tenn.
Stormont, Va.

Cumberland, Md.
Jamesville, N. C.

Marks, Ruby Genevieve
A.B. (Salen), Education, History. (S')

Martin, Lelia Virginia
A.B. (Westhampton), Education, English. (S)

Martin, Thomas Leon
A.B. (Duke), History, English. (S)

Matheson, William McRae
A.B. (Duke), Education. (S)

Mathews, Joseph Chesley
A.B. (Furman). A.M. (Duke), German. (S)
*Mathews, Joseph James
A.B. (Duke), History, Political Science.
*Mattox, William Reuben
A.B. (Duke), Economics, Polīitical Science.

Maultsby, William DeVane
A.B. (Duke), Education. (S)

Meares, Jefferson Sullivan
B.S. (University of South Carolina), M.S. (North Carolina State College), Physics.
Merritt, Eglantine
A.B. (Greensboro College), French. (S)

Metler, Alvin Velbert
B.S. (Adrian), Chemistry, Physics.

Midgette, John Barker
A.B. (Duke), Education. (S)

Miller, Paul Jones, Jr.
B.S. (Mississippi A. and M.), Political Science, Economics.

Milner, Morris Edwin
A.B. (University of Richmond), Education. (S)

Montgomery, Margaret Elizabeth
A.B. (Duke), Engiish, French. (S)

Moore, John Watson
A.B. (Davidson), Education, Economics. (S)

Morehead, Charles Galloway
A.B. (Hendrix), English.

Morehead, Sara Frances
A.B. (Galloway Woman's College), English.

Morgan, John Wesley
A.B. (Duke) Education. (S)
*Morris, Esther Jane
A.B. (Duke), Zoölogy.

Morton, Catherine Serene A.B. (Asbury), English. (S)

Moss, Sara Newbern
A.B. (Duke). Education. (S)

Mustard, Walter Edward
A.B. (Duke). Education, Mathematics. (S')

Myers, Rachel Edna
A.B. (Bridgewater), Psychclogy.

Nance, Jeannette
A.B. (Greensboro College), French, History. (S)

Neal, John Washington A.B., A.M. (Duke), Education. (S)

Neely, Robert Russell
B.S. (Hampden-Sidney), French, Spanish. (S)

Nichols, Hugh Lester
A.B. (Duke), Religion. (S)

[^47]Southern Pines, N. C.
Portsmouth, Va.
Durham, N. C.
Mt. Gilead, N. C.
Jacksonville, Fla.
Sardis, Ky.
Pen Hook, Va.
Council, N. C.
Raleigh, N. C.

Roxboro, N. C.
Adrian, Mich.
Hillsboro, N. C.
Meridian, Miss.
Wilmington, N. C.
Burlington, N. C.
Winston-Salem, N. C.
Conway, Ark.
Conway, Ark.
Selma, N. C.
Raleigh, N. C.
Currie, N. C.
Forest City, N. C.
Mechanicsburg, Va.
Broadway, Va.
Asheville, N. C.
Durham, N. C.
Pamplin, Va.
Durham, N. C.

Nicholson, Maude L.
A.B. (Duke), French, History.

Noell, Lizzie Reade
A.B. (Duke). English.

Noell, Margaret Jeannette
A.B. (North Carolina College for Women), Education. (S)

O'Keeffe, Walter Fite A.B. (Texas Christian), Political Science.

Pace, Donald Metcalf B.S. (Susquehamna), A.M. (Duke), Zoölogy, Botany.

Page, Julian Bernice Belmont, N. C. A.B. (University of North Carolina), Education, History. (S)

Parkhurst, A. J.
Ocala, Fla.
B.S. (John B. Stetson University), Education. (S)

Parks, E. Taylor Mulberry, Tenn.
A.B. (Carson-Newman), A.M. (University of Tennessee), History.

Patterson, John Clarke
A.B., A.M. (University of Texas), History.

Peacock, Serene Hooks
Fremont, N. C. A.B. (North Carolina College for Women), Education. (S')

Perry, Haywood Arnold Durham, N. C. A.B. (Duke), Education. (S)

Pettigrew, Richard Campbell A.B. (Furman), A.M. (University of North Carolina), Enclish, Greek, Latin. (S)
Petty, Clara Octavia
A.B. (Duke), Education. (S)

Plemmons, William Howard
A.B. (Wake Forest), History. (S)

Pool, Bob Lem
A.B. (Duke), Religion, Philosophy.

Poole, Frances
A.B. (North Carolina College for Women), Mathematics. (S)

Poole, Mae Johnson
A.B. (Flora Macdonald), Education. (S')

Powell, Gamaliel Wyatte Holmes B.S', M.S. (Emory), Chemistry.

Powell, Margaret Alice A.B. (Greensboro College), French, English.

Powell, Thomas Edward
A.B. (Elon), A.M. (University of North Carolina), Zoölogy.

Power, Sara Jane
A.B. (Duke), Education, Religion.

Pridgen, Lorraine Isley
A.B. (Duke), Education. (S)

Priepke, Rudolf Julius
B.S. (Elmhurst), Chemistry, Physics

Pritchett, William Kendrick
A.B. (Davidson), Greek, Latin.

Ratchford, Benjamin Ulysses A.B. (Davidson), A.M. (Duke), Economics. (S)

Rawles, Ferald Alston A.B. (Elon), Zoälogy. (S')

Rayner, Kenneth Tyson Wake Forest, N. C. A.B. (Wake Forest), A.M. (Duke), Mathematics, Education. (S)

Rees, Edward Jeffries A.B. (Asbury), B.D. (Boston), Religion.

Reeves, Ruby Edith
A.B. (Duke), French. (S)

Reitzel, Charles Hidden
A.B. (Lcnoir-Rhyne), Education. (S)

Riley, Eunice Williams
A.E. (Duke), Education, Mathematics. (S)

Rivera, Rodolfo Osvaldo
A.B. (Southwestern Louisiana Institute), A.M. (Duke), History (S)

Roberts, Cortelyou John
B.S., M.S. (North Carolina State College), French. (S)

Roberts, Margaret Charlotte
A.B. (Elon), English.
*Robertson, Emma Laura
A.B. (Duke), English, Philosophy.

Robinson, Boyd B.
A.B. (Lenoir-Rhyne), Education. (S')

Rodriguez-Diago, Andres
A.E. (Duke). Zoollogy, History. (S)

Root, Raymond Willard
A.B. (Milton), A.M. (Duke), Zoölogy.

Ross, Jennings
A.B. Greensboro College), Education. (S)

Royall, John Edward
A.B (Charleston), Education. (S)

Sain, Lodena
A.B. (North Carolina College for Women), Education. (S)

Sanderson, Jesse Ormond
A.B. (Duke), Education, Economics. (S)

Sasser, Roxie Johnson
A.B. (Duke), English, Education. (S)

Sawyer, Roma Elizabeth A.B. (Duke), A.M. (University of Pennsylvania), Political Science, Economics.
Saylor, John Henry Fredericktown, Mo. A.B. (Southern Metliodist University), A.M. (Duke), Chemistry.

Schallert, Dorothy Amaryllys Winston-Salem, N. C. A.B., A.M. (Dukc), Zoölogy, Botany.

Scott, Lois Collins
A.B. (Duke), Education. (S)

Seabolt, Louise
A.B. (Duke), A.M. (Columbia), History.

Seay, Hibernia A.B. (Randolph-Macon), French, English, History

Seeley, Emetta Meed Durham, N. C. A.B. (Connecticut College for Women), Religion, History.

Sessoms, Louise Elizabeth Fuquay Springs, N. C. A.B. (Duke), Religion. (S)

Shafer, Julia Simpson Dobson, N. C. A.B. (Emory and Henry), English. (S)

Sharkey, William Kenneth
Greenwood, Ind. A.B. (DePauw), A.M. (Brown), Economics, Psychology.

Shaw, Thomas Jackson, Jr.
Greensboro, N. C.
A.B. (Duke), English.

Shipp, Elsie P. A.B. (Meredith), French, Education. (S)

[^48]Shipp, Mary Elizabeth Durham, N. C.
A.B. (Duke). Zoölogy. (S)

Shuford, Bessie Crocker
A.B. (Limestone), Education. (S)

Simpson, William Hays
A.B. (Tusculum), A.M. (Duke), Political Science. History,

Slayden, Milton A.B. (Trinity), Education. (S)

Smith, Cecil Cline Durham, N. C.
A.B. (University of North Carolina), Education. (S)

Smith, Culver Haygood Pittsburgh, Pa.
A.B. (Duke), A.M. (Yale), History.

Smith, Hugh Preston Wake Forest, N. C.
A.B. (Wake Forest), A.M. (Duke), Education. (ङ)

Smith, Rebert Sidney Thomaston, Conn.
A.B., AM. (Amherst), Economics, History.

Smith, Sarah Olive
A.B. (Guilford). Education. (S)

Snapp, Elizabeth
A.B. (University of Kentucky), English. (S')

Snuggs, Henry Lawrence A.B. (Wake Forest), A.m. (Duke), English.

Southerland, Bessie Juanita
A.B. (Duke), English. (S)

Sowell, John Pierce
A.B. (Furman), Education. (S)

Spikes, Lewis Everett
A.B. (Duke), Education. (S)

Stackhouse, Arva Eastwood
A.B. (Franklin), A.M. (Duke), History.
*Stalvey, James Benjamin A.B. (Duke), History, Political Science.

Starling, Mary Lee A.B. (Greensboro College), English, History. (S)

Starnes, Alvin Bradley A.B. (Duke). Education, English. (S)

Staton, Ennis Calvin A.B. (Wake Forest), Education. (S)

Stephens, Hubert Wesley B.S. (Illinois Wesleyan), Physics, Mathematics, Chemistry.

Stewart, Luna Agnes A.B. (Florida State College), English, History. ( - )

Stokes, Ruth Wyckliffe Mountville, S. C.
A.B. (Winthrop), M.A. (Vanderbilt), Mathematics, Physics. (\$)

Stone, Alta Ruth
Durham, N. C A.B. (Duke), Education.

Stough, Theodore Elias A.B. (Duke), Education, Religion. (S)

Strother, Eura Vance A.B. (Duke), Education. (S)

Strother, Melissa Adelle A.B. (Duke), Latin. (S')

Stutts, DeWitt Talmage A.B., A.M. (Duke), Education. (S)

Styron, Gertrude Mars A.B. (East Carolina Teachers College), Education, French. (S)

[^49]Sugden, Herbert Wilfred Asheville, N. C.
A.B. (Harvard), A.M. (Duke), English.

Swaringen, Roy Archibald
A.B. (Duke), Education. (S)

Sydnor, Elmer Williams
A.B. (Richmond), A.M. (Columbia), English.

Taylor, Waller Littlepage, Jr.
A.B. (Duke), Chemistry, Biology. (S)
$\dagger$ Teeter, Marvin Frank
A.B. (Duke), Botany. (S)

Thomas, John Frederick
A.B., A.M. (University of Michigan), Psychology

Thompson, Lacy Hunter
A.B. (Asbury), Religion. (S)

Tillery, Doris Katherine
A.B. (Meredith), Mathematics.

Tilley, Ernest Clarence Durham, N. C.
A.B. (Duke), History. (S)

Tilley, Nannie Mae Bahama, N. C.
A.B. (Norti Carolina Collcge for Women), Histor:. (S)

Tipton, Samuel Ridley Macon, Ga.
A.B. (Mercer), Zoölogy, Chemistry.

Torrey, Annie Laurin Union Church, Miss.
A.B. (Mississippi State College for Women), German. (S)

Trentham, Ina Rankin
Mars Hill, N. C.
A.B. (Carson-Newman). French, History.
$\dagger$ Trentham, Shannon Otis
B.S. (Carson-Newman), Lotany, Zoollogy. (S)
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A.B. (Winthrop), Education.

Trueblood, Paul Graham Roseburg, Oregon
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A.B. (Greensboro College), French, Education. (S)

Tyson, Marie Harris Mebane, N. C.
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A.B. (Butler), French, History, Psychology.

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Wall, Reid
B.S., B.D. (Emory), Religion, Psychology.

Walston, Rosa Lee A.B. (Woman's College, Alabama), M.A. (Birmingham-Southern), M.A. (Columbia), English.
Wannamaker, Elizabeth Bates
A.B. (Winthrop), Education, English. (S)

Ward, Carrie Mae
A.B. (East Carolina Teachers College), French. (S)

Ward, Charles Eugene
A.B. (Baker), A.M. (Duke), English.

Ward, Claude
B.S. (Wake Forest), Education. (S')

[^50]Warren, Alice Cain
A.B. (Winthrop), Education. (S)

Warren, Marion
A.B. (Duke), Education. (S)

Warrick, Edward Candler, N. C.
A.B. (University of North Carolina), Education, History. (S)

Welch, Elizabeth Norfolk, Va.
A.B. (Greensboro College), Education, Latin. ( $\mathrm{S}^{\prime}$ )

Westerhof, Anthony Cornelius
Holland, Mich.
A.B. (Calvin), A.Mr. (Duke), Psychology, Pliilosnohy.

Whaley, Grace Wine Fordtown, Tenn.
A.P. (Carson-Newman), A.M. (Duke), Euglish.

Whaley, Otis Fordtown, Tenn.
B.S. (East Tennessee State Teachers College), Ed.NI. (Duke), History.

Wheeler, Harold Peyton
Durham, N. C. A.B. (Wofford), A.M. (Duke), English. (S)

White, Joseph Benton
A.B. (Wofford), Education. (S)

White, Sara Pitzer
A.B. (Flora Macdonald), Education. (S)

Whitman, William Tate
A.B. (Duke), Political Science, History. (S)

Wiggins, Ruth Alford Wilson, N. C. A.B. (North Carolina College for Women), Education. (S)

Wilkerson, Beulah Ruth A.B. (Duke), Education. (S)

Wilkerson, Starling Dwight
A.B. (Duke), Education, History. (S')

Wilkins, Margaret Moring
A.B. (Elon). English, Education. (S)

Williams, Bettie Neal
AB. (North Carolina College for Women), French. Englich. (S)
Williams, Harold Fish Ladysmith, Wis. Ph.B. (University of Wisconsin), Botany, Zoölogy.
Williams, Harvey Page A.B. (William and Mary), Mathematics. (S)

Williams, Winona
A.B. (Greensboro Colle.ge), English. (S)

Williamson, Francis Marvin
Brookneal, Va.
Mount Airy, N. C.
A.B. (Duke), Education. (S')

Wilson, Dorothy Estelle
A.B. (Duke), Education, Zoölogy. (S)

Wilson, Elizabeth Gladys A.B. (Duke), Education. (S)

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A.B. (Earlham), Botany. (S)

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Woodson, Mary Eliza Lynchburg, Va. A.B. (Greenshoro College), Economics, Education. (§')

Woody, Robert Hilliard Louisville, Ky. Ph.B. (Emory), A.M. (Duke), History.
Wynne, Lemuel Bruce A.B. (Duke), Education. (S)

[^51]Wynne, Waller, Jr.
A.B. (University of Richmond), English. (S)
Young, Rena Gibbons
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Charlotte, N. C. A.B. (Randolph-ifacon Woman's College.), History. (S)
Zeigler, Isabelle Gibson Louisburg, N. C.
A.M. (Ohio State Univ Tarboro, N. C.
B.S. (North Carolina College for Women), Education.
SUMMVARY
Graduate students, First Summer Term, 1929 ..... 223
Graduate students, Second Summer Term, 1929 ..... 94
Graduate students, Academic Year, 1929-30 ..... 193
510
Deduct for duplications ..... 92
Total enrollment ..... 418

# BULLETIN <br> OF <br> Duke University 

## CATALOGUE NUMBER



## 1929-1930 <br> ANNOUNCEMENTS FOR 1930-1931

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## BULLETIN

# OF <br> Duke University 

CATALOGUE NUMBER



1929-1930
ANNOUNCEMENTS FOR 1930-1931

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## UNIVERSITY CALENDAR

1930
June
June
June
July
7. Saturday-Registration of local students for Summer School, first term.
9. Monday-Registration of students for Summer School, first term.
10. Tuesday-Instruction begins for Summer School, first term.

July 18-19. Friday, Saturday-Final Examinations for Summer School, first term.
July 21. Monday-Instruction begins for Summer School, second term.
Aug. 27-28. Wednesday, Thursday-Final Examinations for Summer School, second term.
Sept. 17. Wednesday, 9 A.m.-Assembly for all Freshmen. Freshmen orientation program begins.
10 A.m.-Entrance examinations for students not admitted by certificate.
Sept.
20. Saturday, 4 P.m.-First regular faculty meeting of the academic year.
Sept. 22. Monday-Freshmen instruction begins.
Sept.
23. Tuesday-Registration and matriculation of new students with advanced standing.
Sept. 24. Wednesday-Formal opening of college. Registration of matriculated students.
Sept. 25. Thursday-Recitations for Sophomores, Juniors, and Seniors begin.
Sept. 25-26-27. Thursday, 9 A.m. to 1 p.m., $2: 30$ p.м. to 4 p.m., Friday, 9 A.m. to 1 p.m., $2: 30$ p.m. to 5 p.m., Saturday, 9 A.M. to 1 P.M.-Registration of graduate students.

Nov. 11. Tuesday—Armistice Day-Part holiday—Public exercises.
Nov. 19-22. Wednesday, Thursday, Friday, and Saturday-Midsemester examinations.
Nov. 27. Thursday-Thanksgiving Day-A holiday.
Dec.
11. Thursday—Duke University Day—Not a holiday.

Dec.
22. Monday, 1 P.M.-Christmas recess begins.

1931
Jan.
3. Saturday, 8:30 A.m.-Instruction is resumed.

Jan.
21. Wednesday-Mid-year examinations begin.

Jan. 31. Saturday-Last day for matriculation for second semester.
Feb.
2. Monday-Second semester begins.

Feb.
2. Monday-Last day for submitting subjects for graduating orations.
Feb. 23. Monday-A holiday-Civic Celebration in honor of Washington's birthday.
Mar. 25-28. Wednesday, Thursday, Friday, and Saturday-Midsemester examinations.
Apr. 1. Wednesday-Last day for submitting orations for Wiley Gray Contest.
Apr. 2. Thursday, 4 P.M.-Easter recess begins.
Apr. 7. Tuesday, 8:30 A.m.-Instruction is resumed.
May

1. Friday-Last day for selection of courses for ensuing year.
May 28. Thursday-Final examinations begin.
June 7. Sunday-President's address to graduating class.
June 8. Monday-Annual meeting of the Board of Trustees.
June 8. Monday-Annual meeting of the Alumni and Alumnae Councils.
June 8. Monday evening-Graduating orations.
June 9. Tuesday morning-Commencement sermon.
June
2. Tuesday-Alumni Day-Class Reunions.

Afternoon-Alumni Address-meeting of the Alumni Association. Afternoon-Alumnae Address-meeting of the Alumnae Association.
June
June 10. Wednesday morning-Commencement address; graduating exercises.
June 10. Wednesday afternoon at sunset-Lowering of the Flag by the graduating class.

## 1930



## 1931

| JANUARY | APRIL |  |  |  |  |  |  | JULY |  |  |  |  |  |  | OCTOBER |  |  |  |  |  |  |
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| FEBRUARY | MAY |  |  |  |  |  |  | AUGUST |  |  |  |  |  |  | NOVEMBER |  |  |  |  |  |  |
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| MARCH | JUNE |  |  |  |  |  |  | SEPTEMBER |  |  |  |  |  |  | DECEMBER |  |  |  |  |  |  |
| M T W T F S | $s$ | m | T | w | T | F |  | s | M | T | w | T | F |  | s | M | T | w | T | F | 3 |
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| C. W. Toms................ | New York, | N. Y. |
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| J. C. Wooten. | Durham, | N. C. |

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| m, | N. C. |
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Dormitory No. 1

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911 Monmouth Ave.

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1002 Monmouth Ave.

819 Sixth St.

Dormitory No. 1

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$\dagger$ Harmon, Thomas Leonhardt Economics 923 Fifth St.
A.B. Emory, A.M. University of Chicago

Jenkins, Sanford Swindell Chemistry 809 Second St.
A.B., A.M. Duke University

Mabry, William Alexander History Dormitory No. 1
A.B., A.M. Duke University, A.M. Harvard University

[^60]| Major, Charles Leslie <br> Education A.B., A.M. William and Mary College | Education 814 Sixth St. |
| :---: | :---: |
| Metler, Alvin Velbert <br> Chemistry <br> B.S. Adrian College | Chemistry 1120 W. Main St. |
| Pace, Donald Metcalf Zoölogy <br> B.S. Susquehanna University, A.M. Duke Un | Zoölogy Dormitory No. 1 A.M. Duke University |
| Parks, E. Taylor History <br> A.B. Carson-Newman College, A.M. Univers | History <br> Dormitory No. 1 <br> e, A.M. University of Tennessee |
| Patterson, John Clarke History <br> A.B., A.M. University of Texas | History Dormitory No. 1 |
| Root, Raymond Willard Zoölogy A.B. Milton College, A.M. Duke University | Zoölogy 205 Watts St. uke University |
| *Sharkey, William Kenneth Economics <br> A.B. DePauw University, A.M. Brown Unive | Economics 817 Second St. <br> M. Brown University |
| Smith, Culver Haywood History <br> A.B. Duke University, A.M. Yale University | History Box 452, D. U. <br> Yale University  |
| Smith, Robert Sidney Economics A.B., A.M. Amherst College | Economics Box 754, D.U. |
| Stephens, Hubert Wesley Physics B.S. Illinois Wesleyan College | Physics Dormitory No. 1 |
| Stokes, Ruth Wyckliffe Mathematics <br> B. A. Winthrop College, M.A. Vanderbilt Un | Mathematics 12 Glenn Apts. <br> Vanderbilt University |
| Sugden, Herbert Wilfred English <br> A.B. Harvard University, A.M. Duke Univer | English 201 Faculty Apts. M. Duke University |
| Sydnor, Elmer Williams English A.B. Richmond College, A.M. Columbia Univ | $\begin{aligned} & \text { English } 1012 \text { Gloria Ave. } \\ & \text { Columbia University } \end{aligned}$ |
| Tipton, Samuel Ridley Zoölogy A.B. Mercer University | Zoölogy Dormitory No. 1 |
| Westerhof, Anthony Cornelius Psychology A.B. Calvin College, A.M. Duke University | Psychology uke University $\quad$ Dormitory No. 1 |

## INDUSTRIAL RESEARCH FELLOWS

(Liggett and Myers Foundation)
Darkis, Frederick Randolph Chemistry 506 Buchanan Blvd.
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Hall, Joseph Alfred Chemistry 1118 N. Duke St.
B.A., M.S. University of Wisconsin

[^61]Jones, Edwin Patterson Chemistry 619 S. Duke St. A.B., A.M. Duke University, Ph.D. Yale University

Powell, Gamaliel Wyatte Holmes Chemistry 1801 Lakewood Ave. B.S., M.S. Emory University

Powell, Thomas Edward Zoölogy Elon College, N. C. B.A. Elon College, M.A. University of North Carolina

## GRADUATE ASSISTANTS

Anderson, Ewing English Dormitory No. 1
A.B. University of Florida, A.M. Duke University

Basler, Roy Prentice English 214 Faculty Apts.
A.B. Central College, Missouri

Blake, Nelson Morehouse History Dormitory No. 1
A.B. George Washington, A.M. Duke University

Braswell, John William English Dormitory No. 3
A.B. Duke University

Brewer, Anne Eliza French Meredith College
A.B. Meredith College, A.M. Columbia University

Burch, James Charlie Horton English 316 N. Elizabeth St.
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Callihan, Alfred Dixon Physics Dormitory No. 1
A.B. Marshall College

Chesley, Leon Carey Zoölogy Dormitory No. 1
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Clark, Thomas Dionysius History 119 Jarvis
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Cox, Henry Miot Mathematics Faculty Apts.
B.S. Emory University

Davidson, Elizabeth Huey History 12 Glem Apts. B.S., M.S. University of Tennessee

Elmore, Kelly Lee Chemistry 115 Faculty Apts.
A.B. Duke University

Gillaspie, Athey Graves Chemistry Dormitory No. 1
B.S. Lynchburg College

Godard, James McFate Education Dormitory No. 1 A.B. Park College

Jackson, David Kelly, Jr. English Dormitory No. 1 A.B. Duke University

Little, Lawrence Calvin Religion 819 Sixth St. A.B. Davidson, A.M. Duke University

McCulloch, Thomas Logan Psychology Dormitory No. 1 A.B. Whittier College

McMillan, Montague English 204 Faculty Apts. A.B. Limestone College, A.M. George Washington

Pettigrew, Richard Campbell English Dormitory No. 1 A.B. Furman University, A.M. University of North Carolina

Priepke, Rudolf Julius Chemistry Dormitory No. 1 B.S. Elmhurst College

Schallert, Dorothy Amaryllys Zoölogy 606 Buchanan Blvd. A.B., A.M. Duke University

Seay, Hibernia French 702 Buchanan Blvd. A.B. Randolph-Macon College

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Snuggs, Henry Lawrence English 1018 Gloria Ave.
A.B. Wake Forest College, A.M. Duke University

Trentham, Shannon Otis Botany 814 Second St. B.S. Carson-Newman College

Trueblood, Paul Graham English Dormitory No. 1 A.B. Willamette College

Whitman, William Tate Accounting Box 606, D. U. A.B. Duke University

Williams, Harold Fish Botany 909 Gregson St. Ph.B. University of Wisconsin

## GRADUATE SCHOLARS

Balch, Clifford Perry
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Dormitory No. 1
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Chen, William Yuanlung Psychology Dormitory No. 1
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deBruyne, Jacob Marinus Anton Chemistry 1023 Monmouth Ave.
A.B. Duke University

Dunkle, Margaret Robert Latin 702 Buchanan Blvd.
A.B. Florida State College for Women
Fry, Glenn Ansel Psychology Dormitory No. 1
A.B. Davidson College

Gathings, James Anderson Political Science Dormitory No. 1
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Gillock, Emmie May Mathematics 1030 W. Trinity Ave.
A.B. Mississippi State College for Women

Griffin, Mabel Jeannette Mathematics 1211 Carolina Ave. A.B. Duke University

McCaskill, Leona Wilson Latin 806 Third St. A.B. Winthrop College

McEwen, Noble Ralph Education Dormitory No. 1 A.B. Birmingham-Southern

Miller, Paul Jones, Jr. Political Science 2306 Twelfth St. B.S. Mississippi A. \& M. College

Pritchett, William Kendrick Greek Dormitory No. 1 A.B. Davidson College

Underwood, Eugene Taylor French Dormitory No. 1 A.B. Butler University

## SABBATICAL LEAVE

Sabbatical leave of absence to members of the Faculty is granted on the following conditions:

1. Every member of the general faculty shall be entitled to sabbatical leave after six years in the service of the University. Such leave may be taken for a full year at half salary or a half year at full salary.
2. In order to obtain a sabbatical leave written notice of the intention to take such a leave must be filed with the President of the University by November fifteenth of the academic year preceding the one in which the leave is to take effect.
3. If in exceptional cases it should develop that the granting of leave to an applicant during the year for which application was made would raise very serious difficulties detrimental to the best interests of the applicant's department or school, or to the interests of the institution as a whole; or because of questions concerning the applicant's period of service prior to the leave, the President shall appoint a committee which shall have power to decide the question of granting the sabbatical leave for the particular year under consideration. This committee shall consist of five members as follows: two members of the general faculty appointed yearly by the President, the Secretary of the University, the Dean of the school or college of which the applicant is a member, the chairman of the applicant's department, or should no such chairman exist another member of the applicant's department.
4. If this committee should decide against the granting of a sabbatical leave for the year for which the applicant applied, the applicant would be eligible for a sabbatical leave the following year or any year thereafter upon making application in due form as above.
5. After September 1, 1928, if a member of the faculty on becoming eligible for sabbatical leave does not for personal reasons apply for such leave, he does not forfeit the right to such leave, and he may count the additional years of service prior to his leave toward the six years of service necessary before he can apply for a subsequent leave. If in an exceptional case an applicant for personal reasons applies for a sabbatical leave to be effective in advance of his regular year and such leave is granted, he shall not be eligible for a subsequent leave until he has served six years plus the number of years by which this leave is advanced.
6. On recommendation of the committee after leave of absence has been granted it may be postponed for urgent reasons and under conditions to be determined by the committee.
7. All those cases which have occurred in the past or which may occur in the future in which leave of absence is granted under conditions where the absentee receives full pay for a half year or half pay or more for a full year's leave of absence shall be considered as regular sabbatical leave under these regulations.
8. These regulations shall become effective as of September 1, 1928. Sabbatical leaves under these regulations shall begin with the academic year 1929-30. The present regulations applying to the sabbatical leave shall be effective for such leaves through August 31, 1929.

## GROUNDS AND BUILDINGS

## THE OLD DUKE UNIVERSITY CAMPUS

The old Duke University campus, consisting of one hundred and eight and a half acres, is situated on Main Street in the western part of the city of Durham. It has been laid out in drives and walks, enclosed by a stone wall. This campus was donated to Trinity College by General Julian S. Carr, Mr. Benjamin N. Duke, and Mr. James B. Duke. Beginning in September, 1930, it will be devoted to the use of a Co-ordinate College for Women and is admirably suited for the purpose since a group of eleven new buildings were planned and built for the use of women students. In addition to the eleven new buildings, including a classroom building, a science building, an auditorium, a library, a Faculty apartment house, a Union recreational and dining hall, and five new dormitories, there are eight buildings left intact from the old Trinity College group. In this group are five dormitories, a classroom building, an administration building, and a gymnasium. All of these buildings are readily adaptable to the use of women students.

## THE NEW DUKE UNIVERSITY CAMPUS

In 1926 Mr. James B. Duke donated to the University approximately five thousand acres of land to the southwest of the old campus, on which new units of the University have been erected. The buildings on this campus are constructed of native North Carolina stone, and a Tudor-Gothic style of architecture has been used. In the group are an administration building, which also includes classrooms and an auditorium, a hospital and medical building, a chemistry building, a physics building, a biology building, a law building, a library, a School of Religion building, a Union building, and three quadrangle dormitory groups. A memorial chapel is in process of erection. In the Union building are to be found student and faculty dining halls, a coffee shop, private banquet halls, guest suites, lobbies, student publication and organization offices, a post office, a barber shop, and a University store. This building will be the
logical center of student social life and recreational activities. The administration, School of Religion, and law buildings, besides containing adequate classroom space, also contain consultation offices for faculty members. The library, in addition to reading room accommodations, contains ample stacks.

Careful attention is being given to the development of the campus grounds. Walks and drives which make the buildings accessible to students and visitors have been laid. An extensive landscaping program is now under way.

The Stadium, which accommodates 35,000 spectators, is located on the southern part of the new campus in a natural amphitheater surrounded by trees. Entrance is made through three main gate-ways, some distance from the stadium proper, and thence to the stands by means of a grand concourse forty feet wide around the outer edge of the stadium. The playing field is below the level of the surrounding land while the top row of seats is about forty feet above the playing field and the bottom row at least six feet above the ground. The arena provides a standard gridiron and a cinder track a quarter of a mile in length with two two-hundred-and-twenty-yard straightaways.

## TRINITY COLLEGE

AND THE

## COORDINATE COLLEGE FOR WOMEN

Duke University maintains two separate undergraduate colleges of arts and sciences: Trinity College and The Co-ordinate College for Women. The colleges are situated on separate campuses not far apart and connected by a private boulevard. Women in the first two years have all their work on the campus of the Woman's College; those in the more advanced classes may elect courses of instruction offered only on the other campus if they are qualified to register for them. However, a woman student may complete all requirements for the bachelor's degree without taking work on the Trinity campus.

Two degrees are offered by the undergraduate colleges, bachelor of arts and bachelor of science in civil and electrical engineering. Six groups of studies lead to the former of these degrees and are listed with the requirements for the degree of bachelor of science on pages 58 and 59 of this catalogue.

# ADMISSION TO COLLEGE 

## GENERAL REGULATIONS

Applicants able to submit certificates of proficiency in subjects accepted for admission to the freshman class from schools whose work has been approved by the University will be admitted without examination, provided these certificates are properly made out on the regular blank provided by the University, signed by the school principal, and presented before or at the opening of the academic year. The applicant must have completed the course of the school from which he comes. Unless admitted on certificate, every candidate for admission will be examined on the required subjects.

Entrance examinations for the admission of new students will be held on the dates announced in the calendar of the University. All students applying for admission must appear before the Committee on Admission on Wednesday, September 17. Wednesday, September 17, Thursday, September 18, Friday, September 19, and Saturday, September 20, will be devoted to the registration, sectioning, and classification of new students. The first part of this period is devoted to placement tests and to qualifying examinations in English, mathematics, and foreign languages for all Freshmen. Students whose certificates have not been accepted take entrance examinations at this time.

New students with advanced standing from other institutions are requested to appear before the Committee on Admission, Tuesday, September 23. Students who register and matriculate later than the dates named in the University calendar must pay the Treasurer five dollars for the privilege.

It is strongly recommended to parents and guardians that all applicants for admission to Duke University be successfully vaccinated against smallpox and typhoid fever before they enter.

## REQUIREMENTS FOR ADMISSION

The requirements for admission are defined in terms of units. A unit of credit is allowed for a subject of study pursued throughout an academic year at an accredited high school,
if the course has demanded five recitations a week and the prescribed amount of work has been satisfactorily completed. Credit for fifteen units is required for admission to all groups.

The subjects in which credit for admission to the University may be offered and the maximum amount of credit acceptable in each subject are given in the following table:

| UNITS | UNITS |
| :---: | :---: |
| English |  |
|  |  |
| Greek |  |
| German | Physical Geograph |
| French |  |
| Spanish ...................................... 3 | Agricul |
| Mathematics ............................... 4 | Mechanical Drawing |
| History and Civics .......................... 4Physics ............................ 1 | Woodwork, Forging, |
|  | Machine Work |
| Chemistry ................................... 1 | Household Economics $\qquad$ 2 <br> Commercial Subjects $\qquad$ 3 |
| Minimum entrance credits of three units in English, one in |  |
| history, three in mathematics, and four in foreign languages (either all in Latin or two in each of any two of the foreign |  |
| languages accepted for admission, including Latin) are required of all applicants for candidacy for the bachelor of arts |  |
| degree. However, in case the fifteen units of credit for admis- |  |
| sion do not include the full requirements in foreign languages, the student is given an opportunity during his freshman year to make up the deficiency. |  |

## DEFINITION OF REQUIREMENTS

## History-One Unit

The candidate may offer for credit one unit from any of the following subjects. The examination will be based on material similar to that included in the books suggested. In lieu of the textbooks named, candidates may be examined on material contained in any of the courses in history and civics suggested for high schools by the North Carolina Department of Public Instruction.
(a) Ancient History (one unit).

Webster's Ancient History, West's Ancient World, Wolfson's Essentials in Ancient History.
(b) Medieval and Modern History (one unit).

Harding's New Medieval and Modern History, Robinson's Western Europe, West's Modern World.
(c) English History (one unit).

Cheyney's Short History of England, Coman and Kendall's History of England, Larson's Short History of England, Walker's Essentials in English History.
(d) American History (one unit).

Ashley's American History, Channing's A Student's History of the United States, Hart's Essentials of American History, James and Sanford's American History, McLaughlin's History of the American Nation, Muzzey's American History.

## English-Three Units <br> Grammar and Composition

The requirements in grammar and composition are a thorough knowledge of the essentials of English grammar, habitual correctness in spelling, punctuation, sentence structure, paragraphing, and ability to make unified and coherent outlines and to write accurately and clearly on familiar subjects.

## Literature

The classics to be studied in preparation for college English are divided into two classes, those intended for thorough study and those intended for general reading. Preparation in the former class should cover subject-matter and the leading facts in those periods of English literary history to which the prescribed books belong; in the latter class it should consist of a general knowledge of the subject matter and of the lives of the authors. In exceptional cases an equivalent amount of reading and study in other than prescribed works will be accepted.

Special attention is called to the minimum essential program as printed in the Manual of Study issued by the North Carolina Department of Public Instruction.

> Mathematics-Three Units

1. College Algebra.
(a) To Quadratics (one unit).
(b) Quadratics to, and including, Progressions (one unit).
2. Plane Geometry (one unit).

## Latin-Two or Four Units

1. Grammar and Composition (one unit).
2. Four Books of Casar's Gallic Wars (one unit).
3. Six Orations of Cicero (one unit).
4. Six Books of Vergil's 灰neid (one unit).

The student must be able to convert simple English prose into Latin.

The Roman system of pronunciation is used exclusively in the Latin work of the college course, and applicants for admission are expected to be well drilled in it.

## Greek-Two Units

1. Elementary Grammar and Composition (one unit).
2. Xenophon's Anabasis, Books I-IV (one unit).

## French-Two Units

During the first year the work should comprise: (1) Elementary grammar and at least 100 to 150 pages of approved reading; (2) grammar completed and 200 to 300 pages of approved reading.

During the second year the work should comprise: (1) a thorough review of the grammar work of the previous year and a study of the irregular verbs and of the uses of the subjunctive mood; (2) grammatical exercises and easy paraphrasing of parts of texts read ; (3) the reading of from 200 to 300 pages of easy modern prose.

## German--Two Units

During the first year the work should comprise: (1) Elementary grammar and at least 75 or 100 pages of approved reading; (2) elementary grammar completed and at least 150 to 200 pages of approved reading.

The second year's work should include the reading of from 150 to 200 pages of literature in the form of easy stories and plays; (2) easy paraphrasing of parts of the texts read; (3) continued drill in the rudiments of grammar.
Spanish-Two Units

The work for the first year should comprise: (1) Elementary grammar and at least 100 to 150 pages of approved reading; (2) grammar completed and 200 to 300 pages of approved reading.

During the second year the work should include: (1) a thorough review of the grammar-work of the previous year and a study of the irregular verbs and of the use of the subjunctive mood; (2) grammatical exercises and easy paraphrasing of parts of texts read; (3) the reading of from 200 to 300 pages of easy modern prose.

## ELECTIVE SUBJECTS FOR ENTRANCE CREDITS

A candidate may offer additional entrance credit from the following subjects:

## English

Students who have completed four years of English in an approved school will receive credit for one unit in addition to the three units required for admission to the freshman class.

## History and Civics

In addition to the unit required, a candidate may present credit from the subjects which he has not offered as required entrance in history or civics.

## Greek

Homer's Iliad, I-III, with prosody and sight translation, may be offered as elective credit for one unit.

## Latin

One or two units of work in any of the four subjects in Latin named above under the sub-topic, "Latin," under the topic, "Definition of Requirements," may be offered for elective credit. Students presenting two units of Latin as one of the foreign languages required for entrance may present an addlitional elective unit in Latin.

## French

A year's work in French done according to the method outlined on p. 30, may be offered for an elective credit of one unit. In addition to the two years of work in French, a student may present for an elective unit a third year's work done in an approved manner.

## German

A year's work in German done according to the methods outlined on p. 30, may be offered for an elective credit of one unit. In addition to the two years of work in German, a student may present for an elective unit a third year's work done in an approved manner.

## Spanish

A year's work in Spanish done according to the methods outlined on p. 31, may be offered for an elective credit of one unit. In addition to the two years of work in Spanish, a student may present for an elective unit a third year's work done in an approved manner.

## Mathematics

One-half unit credit each is allowed for Solid Geometry and Plane Trigonometry.

## Physics

Credit for one elective unit will be allowed for a year's work in elementary physics consisting of (1) recitations based on such texts as Cahart and Chute's, High School Physics; Millikan and Gale's, First Course in Physics, or Mann and Twiss's, Physics, with adequate lecture-table experiments by the instructor; (2) at least thirty experiments worked out by students individually in the laboratory, of which a neat report is made in proper form (the number of experiments performed is not so important as the quality of work done) ; (3) lectures and recitations on the practical application of the principles studied to the community life and to the home.

## Chemistry

A year's work in chemistry conducted according to the same method suggested for that in physics will be accepted for an elective unit of credit.

## Biology

An elective credit of one unit is allowed for a year's work in any of the following biological sciences:

General Biology.-One year of study by the laboratory method devoted to typical animals and plants, covering the facts of morphology and physiology. Such a text as Hunter's, $A$ Civic Biology, is recommended. Candidates for admission must present satisfactory laboratory notebooks.

Botany.-A year of work based on such a text as Bergen and Caldwell's High School Botany. Candidates for admission must present satisfactory notebooks.

Zoölogy.-A year of work based upon such a text as Linville and Kelley's, Introduction to Zoölogy. Candidates for admission must present satisfactory notebooks.

## Mechanical Drawing

Elective credits of two units may be offered in mechanical drawing. Each year's work must be satisfactory in both quantity and quality. Drawing-books or plates must be submitted by all candidates offering this subject.

## Physical Geography

The year's work in physical geography may be offered as one unit; it should be based on a modern text-book and should include an approved laboratory and field-course of at least forty exercises performed by the student.

Agriculture and Household Economics
Maximum elective credits of two units may be offered in either agriculture or household economics by graduates of approved schools in which the teaching in these subjects has met the requirements of the North Carolina Department of Public Instruction.

## Woodworking, Forging, and Machine Work

Graduates of approved schools offering thorough courses for one or two years in woodwork, forging, and machine work will be given credit of one unit for each year of such work certified by the school authorities.

## Commercial Subjects

Graduates of approved schools offering thorough instruction in such commercial subjects as bookkeeping, stenography, and commercial arithmetic, may offer these subjects for credit for admission. Not more than three elective units of credit will be allowed for commercial subjects.

General Science
A full year's work in general science done in a high school of approved standing will be accepted for one unit of elective credit.

## SPECIAL STUDENTS

Students of mature age not fully prepared to enter the freshman class may be admitted as special students. Such students are required to pass the regular entrance examinations in the subjects they propose to take, and all are required to present for admission English, history, and mathematics. They are required also to take fifteen hours of recitation work a week.

## ACCREDITED SCHOOLS

A list of accredited schools is revised from year to year. An applicant for admission to the freshman class who brings from one of these schools a certificate of graduation properly made out and signed by the principal is given credit for the work certified and is admitted to college without examination. Blank forms for recording the work done will be sent on request. Every applicant for admission by certificate is advised to secure a blank, have it properly filled out, signed, and forwarded to the Committee on Admission as early as possible.

## ADMISSION TO ADVANCED STANDING

Applicants for admission to advanced standing in the University must present official certificates of all work done in other institutions of approved standing; otherwise they must stand written examinations on all work for which they are seeking credit. Further, a minimum of one full year in residence at Duke University with the satisfactory completion of at least thirty semester-hours of approved senior work is required of all candidates for the bachelor's degree.

## REQUIREMENTS FOR THE DEGREE OF BACHELOR OF ARTS

The requirements for the degree of bachelor of arts are designed to give students such training in certain fundamental subjects as is essential for intelligent, educated citizens and at the same time to provide for them the opportunity for as wide an election as possible of courses of study interesting and practically helpful to them because congenial to vocations they plan later to pursue. The requirements for the degree are reckoned in semester-hours, a semester-hour being credit given for passing a subject pursued one hour a week during a semester. Credit for one hundred and twenty-six semester-hours, exclusive of physical education, is required for the degree of bachelor of arts in all groups.

The faculty has arranged the six groups of studies given below for the guidance of students in electing the work required for graduation. A student is free to elect any group he may desire, but in each group there is a large amount of work prescribed that in the judgment of the faculty is necessary to prevent a too great scattering of the efforts of the student while giving him a well-balanced course and work likely to be of special value to him in his chosen vocation. Some of the work in each group is left entirely to the choice of the student. With the approval of the Dean of the College and of the Council on Instruction, a student may at any time transfer from one group to another. In case of such a transfer, any prescribed work done in one group that is not prescribed in the other shall count as general elective credit in the group to which the transfer is made, and the student transferring shall make up as soon as possible the work prescribed in the group he has chosen.

No student is allowed to enroll in any semester for more than the equivalent of nineteen semester-hours of work, exclusive of physical education. No course-card is valid until it has the approval of the Council on Instruction and of the Dean of the College. All students, when electing courses are urged to seek the advice of the members of the faculty in whose departments they expect to receive instruction.

Not more than one course of six or eight semester-hours of credit in final fulfilment of the requirements for the degree of bachelor of arts in Duke University may be done in another institution of approved standing, and this course must first be approved for such credit by the head of the department concerned and by the Dean of the College.

# GROUPS OF STUDIES FOR THE DEGREE OF BACHELOR OF ARTS 

GROUP I

## General

This group is based on the traditional requirements for the degree of bachelor of arts. Students who elect it are required to take twelve semester-hours of English, including six of composition and six of literature; eighteen of foreign language, of which not more than six may be in a course beginning the study of a language, and this course must be followed by a second course in the same language; sixteen of biology, chemistry, or physics, including eight each in any two of the three sciences; six of Bible ; six of mathematics; six of economics; six of history ; and elective work sufficient to complete the one hundred and twenty-six semester-hours required for graduation. The eighteen semester-hours of foreign language required in this group must include two of the languages: Greek, Latin, French, German, and Spanish, and the two languages may not both be taken in the same department.

In addition to the seventy semester-hours of work already specified as required in this group, a student electing it is further required to take thirty semester-hours, (thirty-two se-mester-hours if an elementary science is one of the courses), in some subject chosen as a major and in other subjects specifically approved by the head of the department in which the major subject is chosen. A major may be chosen in any department in the University provided the head of the department approves it. The twenty-four or twenty-six semester-hours, as the case may be, required for graduation in addition to the seventy semester-hours of required work and the thirty or thirty-two semester-hours of major-minor work are left as free electives. A student may take as free electives any courses in which he is interested, provided he is qualified for admission to them.

The following arrangement of work is recommended to students in this group:

| Freshman Year | Sophomore Year |
| :---: | :---: |
| S.H. | S.H. |
| English | English ............................. 6 |
| Mathematics | Foreign Language ............. 6 or 12 |
| Bible ................................ 0 or 6 | Bible ................................. 6 or 0 |
| Foreign Language ............. 12 or 6 | Science or History ........... 8 or 6 |
| History or Science ............. $\frac{6 \text { or } 8}{30 \text { or } 32}$ | A required course in Foreign Language, Science, or Economics $\qquad$ 6 or 8 |
| Junior Year |  |
| Required courses in Foreign Language, Science, or Economics $\qquad$ 6 or 14 | Senior Year 30 or 32 Electives restricted only by |
| Electives ........................... 24 or 18 | the general requirements |
|  | for this group. |
| 30 or 32 | 30 or 32 |

A student should observe the following points in arranging his work for the freshman and sophomore years in this group: (1) If he presents as many as three college entrance units in one foreign language, he has the option of continuing that language in college or of discontinuing it; if he presents only two units in any foreign language, he must continue that language in college unless granted permission to discontinue it by the Committee on Admission. He is not permitted to include more than one course of six semester-hours beginning the study of a language among the eighteen semester-hours of required language work, and that course must be followed by a second course in the same language. (2) The required work in language may not all be taken in the same department. (3) The six semester-hours of required work in Bible must be taken in either the freshman or sophomore year. (4) A student must take one of the required elementary sciences, biology, chemistry, or physics, in either the freshman or sophomore year and the second required science not later than the junior year. If he postpones his first natural science to the sophomore year, he may take history in the freshman year and must then take Economics 1 or Economics 102 in his junior year. If he takes natural science and no history in the freshman year, he must, in his sophomore year, take either history or economics and in the junior year the one not taken the year before.

## GROUP II

## Business Administration

This group is designed for students who enter college with the purpose of engaging in some form of business activity after graduation. The required work consists of twelve semesterhours of English, including six semester-hours of composition and six of literature; six of Bible ; eight of biology, chemistry, or physics; six of history; six of mathematics; twelve of foreign language, of which not more than six semester-hours may be a course beginning the study of a language: forty-eight of economics and political science; and six of law. Twenty-two semester-hours are left for free electives.

The following arrangement of courses is authorized for students electing this group:

|  |  | Sophomore Year |  |
| :---: | :---: | :---: | :---: |
| Freshman Year <br> S.H. |  |  | S.H. |
| English | .. 6 | English | 6 |
| Foreign Language ............. |  | Economics 1 | 6 |
| Mathematics ..................... |  | Accounting (Econ. 7) ... | 6 |
| Economics A ..................... |  | Foreign Language ......... | 6 |
| ```Bible```$\qquad$```NoneNone ``` |  | History $\qquad$ <br> or Bible (6) <br> or Science (8) | 6 |
| 30 or 32 |  |  | 30 or 32 |
| Junior Year |  | Senior Year |  |
| Science or History ........... 8 or 6 |  | Law 1 | 6 |
| Economics 102 ................. 6 |  | Economics 203-235 .... | - 6 |
| Economics 104-144, $\quad 105-$ 158, and 106-168 ........... (Elect two year courses) <br> (Elect two year courses) |  | Economics 104-144, 105158 , and 106-168 $\qquad$ | 6 |
| Electives ............................ 6 or 8 |  | junior year) |  |
| 30 or 32 |  | Electives .... | 12 or 14 |
|  |  |  | 30 or 32 |

## GROUP III

## Religion

This group is designed for students who enter college with the purpose of adopting the ministry or other religious or social welfare work as a vocation after graduation. The required work consists of twelve semester-hours of English, including
six of composition and six of literature; eight of biology ; eight of chemistry or physics; six of history, six of economics or political science; twelve of foreign language, of which not more than six may be a course beginning the study of a language; six of mathematics; six of Bible; six of psychology; six of philosophy; and twenty-four of work in the Department of Religion other than Bible 1-2. There are twenty-six semesterhours of free electives.

The following arrangement of courses is authorized for students electing this group:

| Freshman Year | Sophomore Year |
| :---: | :---: |
| S.H. | S.H. |
| English ............................... 6 | English ............................... 6 |
| Bible ................................... 6 | Foreign Language ............. 6 |
| Foreign Language ............. 6 | Biology or History ........... 8 or 6 |
| Mathematics ...................... 6 | *Economics and Political |
| History or Biology ........... 6 or 8 | Science or Psychology .. 6 |
|  | Religion .-.-........................ 6 |
| 30 or 32 |  |
| Junior Year | 30 or 32 |
| Religion ............................. 6 | Senior Year |
| Psychology or Philosophy 6 | Religion ............................. 12 |
| Chemistry or Physics or | $\dagger$ Philosophy or Psychology 6 |
| Economics (6) ............... 8 | Electives ............................. 12 or 14 |
| Electives ............................. 14 or 12 |  |
|  | 30 or 32 |
| 30 or 32 |  |

## GROUP IV

## Pre-Medical

This course is designed for students who expect to pursue the study of medicine after graduation from college. The required work consists of twelve semester-hours of English, including six of composition and six of literature; twelve of foreign language, provided the student pursues the study of French and German until he has completed the equivalent of French 3 and 4 and German 107-08; six of Bible ; ten of physics; sixteen of chemistry, including eight of organic chemistry; eight of zoollogy, twenty-two additional of laboratory science;

[^62]six of psychology; six of history or economics ; six of mathematics; and twenty-four of free electives.

Those students who at the end of their first year of college work are recommended for good and sufficient reasons by their teachers of science and the Dean of the College as being capable of doing acceptable work in a medical school without completing the college requirements for graduation will be allowed to arrange a special course of studies that will prepare them to meet the minimum requirements of first-class medical schools by the end of their sophomore year. The tabulation of courses below is made with this possibility in view.

The School of Medicine will be opened October 1, 1930. Requirements for admission to the School are explained in a special bulletin which may be obtained from the Dean of the School of Medicine.

The following arrangement of courses is authorized for students electing this group. The student taking his A.B. degree in this group may postpone some of the work of the freshman and sophomore years until his last two years.

| Freshman Year | Sophomore Year |
| :---: | :---: |
| S.H. | S.H. |
| English ...................................... 6 | English ...................................... 6 |
| Mathematics ............................... 6 Bible .......................................... 6 |  |
| French or German .................... 6 Physics .................................... 10 |  |
| Zoollogy ..................................... 8 Chemistry 21 and 30 (or 151- |  |
| Chemistry 1-2 ............................... 8 152 if student is eligible) ........ 8 |  |
| 34 |  |
| Junior Year 36 |  |
| Psychology ................................ 6 Senior Year |  |
|  | or Economics 102 $\qquad$ 6 Electives .13 $\qquad$ |
| Laboratory sciences ................... 9 |  |
| Electives ...................................... 9 26 |  |
| 30 |  |
| GROUP V |  |
| Teaching |  |
| This group is designed for four classes of students: (A) |  |
| those who expect to teach in colleges or universities, or who for |  |
| milar reasons expect to do | dvanced work in a graduate |

school; (B) those who expect to teach in secondary schools; (C) those who expect to teach in elementary schools; and
(D) those who expect to adopt as a vocation some form of public school administration. For each class a course of study is suggested below. All four classes are required to take the same general work as students in Group I, as follows: twelve semes-ter-hours of English; eighteen of foreign language (except as specifically modified in the descriptions of Classes B, C, and D) ; sixteen of biology, chemistry, or physics, including eight each in any two of the three sciences; six of Bible; six of mathematics; six of economics and government; and six of history.

Since transfer from Group I (General) to Group V (Teaching) is easy, students are advised not to enter Group V until satisfied that they expect to teach after graduation. It is especially difficult, however, for prospective high school teachers to transfer after their sophomore year.

## CLASS A: COLLEGE TEACHING

Students in this class take the same freshman and sophomore work as students in Group I, except that they may take six semester-hours of education and psychology as sophomores. For foreign language work they need take only twelve semesterhours of French and German in college but must complete the equivalent of second-year college work in each. In addition to the sixty-four or seventy hours of work required, including the languages prescribed, each student must complete a major of at least twenty-four semester-hours of work in the subject the student expects to continue in graduate school, twelve semester-hours of work in subjects related to the major and approved by the department in which the major is selected; twelve semester-hours in education and psychology, or either, as a second minor, not including any secondary- or elementaryschool methods; and sufficient free electives to complete the one hundred and twenty-six semester-hours of work required for graduation.

## CLASS B: SECONDARY-SCHOOL TEACHING

Students who expect to teach in high schools should register in this group as early after their freshman year as possible, the work of that year being the same as for Group I. They have
the same general requirements as Group I, except that the eighteen semester-hours of foreign language, which must include two languages, may include as many as twelve semesterhours in courses beginning the study of a language. In addition to the seventy semester-hours of general required work, each student must take the following: twelve semester-hours of work in education, including three of educational psychology and three of secondary education ; three semester-hours of general psychology; three semester-hours of directed observation and practice teaching; six semester-hours, three in each of two fields of high school teaching, in materials and methods; and subject-matter work in the two subjects he expects to teach sufficient to amount to the following minimum amounts in the different fields as follows, including any of the generally prescribed work of Group I; twenty-four semester-hours of English, for prospective teachers of English; twelve semesterhours of Latin, over and beyond the traditional four units of Latin accepted for college entrance, for prospective teachers of Latin; eighteen semester-hours of French, over and beyond the two units of French accepted for college entrance, for prospective teachers of French; eighteen semester-hours of history and six of political science and economics, for prospective teachers of history and the social sciences; thirty semesterhours of biology, chemistry, physics, and geography or geology, for prospective teachers of high school science; and fifteen semester-hours of mathematics, for prospective teachers of mathematics. A student may prepare to teach only one science, or any one subject in high school, by taking a major of twentyfour hours in that subject in addition to general required work in Class B, the required work in education and psychology and the specific required work in directed observation and materials and methods in the chosen subject. Since, however, most inexperienced teachers have to serve an apprenticeship in small high schools, where they must teach classes in more than one subject, students are advised to meet the suggestions of the North Carolina State Department of Public Instruction and prepare to teach in two subjects, according to the course previously outlined in this paragraph.

Students who expect to teach are warned to read carefully the certification rules of the state in which they plan to work
and to advise fully with the Dean's office before electing courses in subjects they are preparing to teach. They are advised also to be careful to take their professional courses in the order outlined by the University department of education, reserving for their senior year the materials and methods courses and the directed observation and practice course. General psychology should be taken in the sophomore or the junior year.

## CLASS C: ELEMENTARY-SCHOOL TEACHING

Students in this class take the same freshman and sophomore work as students in Group I, except that they take one course in education each year, which may not, however, be substituted for English either year. General requirements are the same as in Class B. Six semester-hours of education each year, or a total of twenty-four semester-hours for the four years, take the place of the major described in Group I. By the permission of the Dean of the University, students in Class C may take as much as six semester-hours of additional elective work in education, exclusive of any work in general psychology. All students in the group are required to complete a minor of twelve semester-hours in some department other than education, and all must complete at least three semester-hours of general psychology. It is recommended, but not required, that students in this class complete at least six semester-hours in American history and government.

## CLASS D: PUBLIC SCHOOL ADMINISTRATION

This class is planned for students who expect to become principals or superintendents of schools, or to engage in other forms of public school administration. All requirements are the same as for Class C, except that (1) methods courses may be taken in either the secondary or the elementary field, (2) the six semester-hours in American history and government are prescribed, and (3) the work in education must include six semester-hours of school administration and supervision.

## GROUP VI

Pre-Legal

This group is designed for students who expect to study law. The required work in this group consists of twelve se-mester-hours of English, including six of composition and six
of literature; eighteen of two different foreign languages, of which not more than six may be in a course beginning the study of a language, and this course must be followed by a second course in the same language; sixteen of biology, chemistry, or physics, including eight each in any two of the three sciences; six of mathematics; six of Bible; six of history; six of economics; six of psychology; eighteen additional semester-hours of history and twelve additional semester-hours of economics; and free electives to complete the one hundred twenty-six se-mester-hours required for graduation. With the consent of the Department of Engineering the student may substitute three semester-hours of drawing and three semester-hours of surveying for one of the required courses in natural science.

The following arrangement of courses is authorized for students electing this group:

| Freshman Year | Sophomore Year |
| :---: | :---: |
| S.H. | S.H. |
| English .............................. 6 | English .............................. 6 |
| Mathematics ...................... 6 | Foreign Language .............. 6 |
| Foreign Language ............. 6 | Economics 1 ...................... 6 |
| Bible ..................................- 6 |  |
| History 1-2 ....................... 6 | Restricted elective ............. 6 or 8 |
| *Restricted elective ........... 6 or 8 |  |
|  | 30 or 32 |
| 36 or 38 | Senior Year |
| Junior Year | Economics 102 .................... 6 |
| Psychology ....................... 6 | History $104 . . . . . .$. |
| Economics 104-144 ............ 6 | Electives ............................ 18 or 20 |
| $\dagger$ Restricted elective ............ 6 or 8 |  |
| Other electives .................. 14 or 12 | 30 or 32 |
| 30 or 32 |  |

[^63]
# REQUIREMENTS FOR THE DEGREE OF BACHELOR OF SCIENCE IN CIVIL OR ELECTRICAL ENGINEERING 

The studies for the degree of bachelor of science are designed for students who are preparing for civil or electrical engineering as a profession, and lead to the degree of bachelor of science in civil engineering (B.S. in C.E.), or bachelor of science in electrical engineering (B.S. in E.E.).

Either of these degrees requires one hundred and thirtyeight semester-hours of work. Six semester-hours of electives must be taken in economics or political science. If a foreign language is elected it must be taken two years unless a student has sufficient entrance credits to enable him to pursue a more advanced course.

## GROUPS OF STUDIES FOR THE DEGREE OF BACHELOR OF SCIENCE IN CIVIL OR ELECTRICAL ENGINEERING GROUP I

Civil Engineering
Freshman Year
FIRST SEMESTER
SECOND SEMESTER
S.H. S.H.

Chemistry 1 ................... 4 Chemistry $2 \ldots . . . . . . . . . . .$.
English ........................ 3 English ........................... 3
Mathematics 1, $2 \ldots \ldots . \ldots .$. ....... 5 Mathematics 2, $5 \ldots \ldots . . . .$.
Bible 1 .......................... 3 Bible 2 ............................. 3
Drawing $1 \ldots \ldots . \ldots . . . . . . . .$.
Physical Education .............R Physical Education .............. R
17 17
Three weeks of Surveying 10 in summer. Credit, 3 semester-hours. Sophomore Year
English ......................... 3 English ............................ 3
Mathematics 25 ................ 4 Mathematics 30 ................. 4
Physics for Engineers .......... 5 Physics for Engineers .......... 5
Surveying 11 .................. 2 Mechanics 6 .................... 4
Descriptive Geometry 3 ......... 2
Physical Education .............R Rhysical Education .............. R
16
Duke University ..... 59
Junior Year
Electrical Eng. 153 3 Hydrology 122 ..... 3
Hydraulics 107 4 Strength of Materials 108 ..... 3
Materials 109 2 Curves and Earthwork 112 ..... 3
Highways 115 2 Surveying 114 ..... 3
Electives 6 Electives ..... 6
17 ..... 18
Senior Year
Water Supply 123 2 Sewerage 124 ..... 2
Structures 131 3 Structures 132 ..... 4
Reinforced Concrete 133 3 Masonry 134 ..... 3
Railroad Engineering 117 3 Highways 116 ..... 2
Electives 6 Electives ..... 6
17 ..... 17
GROUP II
Electrical Engineering
Freshman Year
FIRST SEMESTER SECOND SEMESTER
S.H. ..... S.H.
Chemistry 1 4 Chemistry 2 ..... 4
English 3 English ..... 3
Mathematics 1, 2 5 Mathematics 2, 5 ..... 5
Bible 1 3 Bible 2 ..... 3
Drawing 1 2 Drawing 2 ..... 2
Physical Education R Physical Education ..... R
17 ..... 17
Three weeks of Surveying 10 in summer. Credit, 3 semester-hours.
Sophomore Year
English 3 English ..... 3
Mathematics 25 4 Mathematics 30 ..... 4
Physics for Engineers 5 Physics for Engineers ..... 5
Mechanism 81 2 Mechanics 6 ..... 4
Descriptive Geometry 3 ..... 2
Physical Education Physical Education ..... R
16 ..... 16
Junior Year
Princ. of Elec. Eng. 151 ...... 4 Princ. of Elec. Eng. 152 ..... 4
Hydraulics 107 4 Strength of Materials 8 ..... 3
Differ. Equations 3 Elec. Measurements ..... 3
Thermodynamics 183 3 Thermodynamics 184 ..... 3
Electives 3 Electives ..... 3
17 ..... 16
Senior Year
Direct Currents 155 ............ 3 Electrical Machinery 154 ..... 6
Alternating Currents $157 \ldots . . .3$ Electric Power Stations 158 ..... 3
Elec. Transmission 5 3 High Freq. Currents 162 ..... 3
High Freq. Currents 161 ..... 3
Electives 6 Electives ..... 6
18 ..... 18

## COURSES OF INSTRUCTION

Note: Courses primarily for freshmen and sophomores are numbered between 1 and 100, those primarily for juniors and seniors between 101 and 200, those primarily for seniors and graduates between 201 and 300. The amount of credit for each course is given in semester-hours following the description of the course.

## DEPARTMENT OF BIOLOGY

PROFESSORS CUNNINGHAM, BLOMQUIST, PEARSE, $\dagger$ WOLF, AND HALL, ASSIST-
ANT PROFESSORS AVERY $\ddagger$ AND HOPKINS, MR. BELL, MR. BRECHER, MR.
trentham, mr. Williams, mr. Chesley, mr. fennel, mr.
PACE, MR. ROOT, AND MR. TIPTON

## BOTANY

Odd-numbered courses are offered in the first semester, even-numbered courses in the second semester.

## FOR UNDERGRADUATES

1. Introductory Botany.-A general course dealing with plants. Two laboratory periods and two conference periods each week. . 4 s.h. Staff
2. Introductory Botany.-A general course which may be taken as a continuation of Botany 1. Two laboratory periods and two conference periods each week. 4 s.h.
3. General Bacteriology.-Laboratory and lectures. 4 s.h.

Mr. Blomquist
52. Local Flora.-Practice in the identification and classification of plants. 3 s.h.

Mr. Blomquist
Prerequisites, Botany 1 and 2.
101. Structure and Classification of Algae, Liverworts, and Mosses.-Laboratory and lectures. 3 s.h.

Mr. Blompuist
Prerequisites, Botany 1 and 2.
102. Structure and Classification of Ferns, Gymnosperms, and Angiosperms. -Laboratory and lectures. 3 s. h. Mr. Avery
Prerequisites, Botany 1 and 2.

[^64]111. Mycology.-Structure and classification of fungi. Laboratory and lectures. 3 s.h.
Mr. Wolf
Prerequisites, Botany 1 and 2.
112. Diseases of Plants.-Special reference to crop plants. Laboratory and lectures. 3 s.h. Mr. Wolf
Prerequisites, Botany 1 and 52 .
151. Plant Physiology.-Laboratory and lectures. 4 s.h.
Prerequisite, Botany 1.
Mr. Avery
[Not offered in 1930-31]
152. Plant Anatomy.-An introduction to general plant anatomy with some reference to cultivated plants. Laboratory and conferences. 3 s.h.

Prerequisite, Botany 1.
Mr. Avery

FOR SENIORS AND GRADUATES
201. Cytology.-A study of the plant and animal cell. Laboratory, lectures, and conferences. 4 s.h. Mr. Avery

Prerequisites, Botany 1 and Zoölogy 1-2 and one other course of intermediate grade.
[Not offered in 1930-31]
202. Inheritance and Variation.-A study of the principles of inheritance and variation in plants and animals. Lectures and conferences. 3 s.h.

Prerequisites, Botany 1 and 2.
Mr. Blomquist
225. Special Problem.-Hours and credits to be arranged.

Staff
ZOOLOGY
Odd-numbered courses are offered in the first semester, even-numbered in the second.

1-2. General Zoölogy.-First semester: An elementary survey of the animal kingdom, with particular reference to invertebrates. Second semester: General principles of vertebrate animal structures, functions, environmental relations, development of the individual and of the race, man's place in nature. 8 s.h.

Professors Pearse and Hall, and Assistant Professor Hopkins
41. Elementary Comparative Anatomy.-This course is a continuation of Course 1-2, and is recommended for pre-medical students. The laboratory work consists of the dissection and comparison of a number of types of vertebrates. 4 s.h.

Professor Cunningham
Prerequisite, Zoölogy 1-2.
44. Comparative Histology.-The evolution of tissues. 4 s.h.

Assistant Professor Hopkins
152. Comparative Physiology.-The primary functions of animals of all groups and a more detailed study of the physiological processes in mammals. 4 s.h.

Professor Hall
Prerequisite, one year of Zoölogy.
181. Animal Micrology.-The technique of preparing normal sections of the various types of tissue. 4 s.h.

Professor Cunningham
191. General Embryology.-The fundamental principles of embryology, especially in the frog and the chick, with some work on the mammal. 4 s.h.

Professor Cunningham
221. Entomology.-The taxonomy, morphology, and physiology of insects, their theoretic and economic aspects. For students who have had at least one year of Zoollogy. Offered in even years. 4 s.h.

Assistant Professor Hopkins
231. Protozoölogy.-A study of the taxonomy, morphology, and physiology of unicellular organisms. For students who have had at least one year of Zoollogy. Offered in alternate years. 4 s.h.

Assistant Professor Hopkins
261. Animal Parasites.-A consideration of animal parasites with particular emphasis upon those infesting man. Of particular interest to students preparing for medicine or public health work. 4 s.h.

Professor Pearse
Prerequisite, Zoölogy 1-2.
COURSES PRIMARILY FOR GRADUATES, BUT OPEN TO SENIORS with adequate training
272. Ecology.-Natural history of animals-relations to environment. Assigned readings, lectures, reports, conferences. For students who have had at least one year of Zoölogy. Offered in odd years. 2 s.h.

Professor Pearse
201. Animal Behavior.-The development of mind in animals. Assigned readings, lectures, reports, conferences. Offered in even years. 2 s.h. Professor Pearse
228. Endocrinology.-This course includes the structure, physiology, and embryology of the endocrine glands. The work consists of lectures and reading assignments and reports. 2 s.h.

Professor Cunningham
232. Advanced Protozoölogy.-Lectures and conferences, on the recent developments in the field of Protozoollogy. In the laboratory an individual problem will be undertaken by each student. The prerequisites for the course are (1) a definite and feasible problem, and (2) the proper training for carrying out this problem. 4 s.h.

Assistant Professor Hopkins
219-220. Research.-Students who have had proper training may carry on research under the direction of members of the faculty. Staff
262. Advanced Parasitology.-Lectures, conferences, and readings dealing with practical and theoretical matters relating to animal parasites. Laboratory work on special problems may be taken in connection with this course by registering for Course 219-220. Offered in odd years. 2 s.h.

Professor Pearse
274. Advanced Ecology.-Readings, conferences, and reports; directed work in field or laboratory. Offered in even years. 2 or more s.h.

Professor Pearse
292. Experimental Embryology.-Lectures, assigned readings, and reports. In the laboratory a study is made of the effects of environment on various forms of animals, including the frog, chick, and mammal. Students electing laboratory work in connection with this course should register for Zoölogy 219-220. 2 s.h. Professor Cunningham
[Not offered in 1930-31]

## HYGIENE AND HEREDITY

8. Hygiene.-This course is open to students of all four years without preliminary requirements. The chief topics for discussion are: human anatomy and physiology; personal hygiene; nutrition; deficiency, bacterial, and protozoal diseases. 2 s.h.

Professor McDougal, Dr. Pearse, and Dr. Davison
107. Heredity and Eugenics.-A non-technical presentation of the biological principles involved in heredity. This course does not give science credit. 3 s.h.

Professor Cunningham

## DEPARTMENT OF CHEMISTRY

PROFESSORS GROSS AND WILSON, ASSISTANT PROFESSORS VOSBURGH AND BIGELOW, DR. HAUSER, DR. BOLICH, MR. SAYLOR, AND MESSRS. ELMORE, FORD, GILLESPIE, JENKINS, METLER, AND PRIEPKE

The courses in the department are planned with the following objects in view: (1) to give students taking chemistry as a required science a thorough knowledge of the elementary principles of the science by studying in the laboratory the more important elements and compounds which have industrial and domestic uses and by surveying briefly the chemical and economic significance of the more important industrial processes; (2) to make provision for the necessary chemical training of scientific and professional students by offering thorough, intensive work in analytical, organic, and physical chemistry; (3) to provide for those students specializing in chemistry as prospective chemists, teachers, or chemical engineers comprenensive training in higher courses, together with the opportunity to engage in investigations both of an industrial and of a pure-science nature and (for teachers) to do practice teaching.

A major in chemistry in Group I consists of twenty-four semesterhours distributed as follows: courses 21, 30, 151-152, 261-262, totaling twenty semester-hours, and four semester-hours chosen from the following courses: 231, 232, 240, 241, 253-254, 270, 215-216.

Unless otherwise specified, odd-numbered courses are offered in the first semester, even-numbered in the second.

1-2. General Inorganic Chemistry.-Lectures, recitations, and laboratory work on the elementary principles of chemistry and on the occurrence, preparation, properties, and uses of the elements and their compounds. It is desirable, though not required, that students taking this course shall have taken elementary physics either in high school or in college. One lecture, two recitations, and three laboratory hours, throughout the year. 8 s.h.

Professor Wilson with Professor Gross, Assistant Professors Vosburgh and Bigelow, Dr. Hauser, Dr. Bolich, Mr. Saylor, and Messrs. Elmore, Gillespie, and Priepke
41. Household Chemistry.-A course dealing with materials used chiefly in the home. It is open to students who have passed Chemistry 1-2 or who have had elementary chemistry accepted for entrance credit. Two recitations and three laboratory hours. 3 s.h. Professor Wilson
21. Qualitative Analysis.-A study of the reactions of acids, bases, and salts in solution as applied to the qualitative analysis of mixtures of inorganic compounds of the more familiar elements. Two lectures and six laboratory hours. Each laboratory section is limited to a maximum of 23 students. 4 s.h. Assistant Professor Vosburgh, Dr. Hauser, and Messrs. Ford and Metler
Prerequisites, Chemistry 1-2 and college algebra.
30. Quantitative Analysis.-A number of representative analyses are carried out in the laboratory and the underlying theory is taken up in the lectures. Two lectures and six laboratory hours. Each laboratory section is limited to a maximum of 23 students. 4 s.h.

> Assistant Professor Vosburgh, Dr. Hauser, and Messrs. Ford and Metler

Prerequisite, Chemistry 21. Analytic geometry and college physics are desirable but not required.

151-152. Organic Chemistry.-An introduction to the study of the compounds of carbon. Both the aliphatic and the aromatic series will be dealt with, and the lectures illustrated by selected laboratory experiments. Two lectures, one recitation and three laboratory hours, throughout the year. 8 s.h.

Assistant Professor Bigelow and Dr. Hauser
Prerequisites, Chemistry 21 and 30 unless specifically excused by the Department.

261-262. Physical and Electro Chemistry.-Fundamentals of general theoretical chemistry illustrated by selected laboratory experiments. Two recitations and three laboratory hours throughout the year. 6 s.h.

Prerequisites, Chemistry 30, 151-152, college physics, and college algebra. Calculus is desirable but is not required.

215-216. Advanced Inorganic Chemistry.-A study of modern valence theory and of inorganic compounds, particularly of the less common types, illustrated by suitable laboratory preparations. Two recitations and three laboratory hours throughout the year. 6 s.h.

Assistant Professor Vosburge
Prerequisites, Chemistry 1-2, 21, 30. Chemistry 261-262 and advanced physics are desirable.
231. Advanced Quantitative Analysis.-A continuation of Course 30, involving some of the more difficult analytical methods. One recitation and six laboratory hours. 3 s.h.

Assistant Professor Vosburgh
Prerequisite, Chemistry 30. Chemistry 261-262 is desirable.
232. Instrumental Analysis.-A study of the use of physical measuring instruments in chemical analysis. One recitation and six laboratory hours for one semester. 3 s.h. Assistant Professor Vosburgh

Prerequisites, Chemistry 30, 261-262, and 231. Laboratory physics is desirable.
260. Colloid Chemistry.-An introductory study of the colloidal state of matter. Two recitations and three laboratory hours for one semester. Semester to be arranged with the Department. 3 s.h.

Assistant Professor Vosburgh
Prerequisites, Chemistry 151-152 and 261-262. Calculus, Chemical Thermodynamics, and advanced physics are desirable.
240. Food and Nutrition.-This course naturally follows course 41 and may be taken by persons passing that course or those who have taken or are taking course 151-152. Two recitations and three laboratory hours. 3 s.h.

Professor Wilson
241. Physiological Chemistry.-A study of the chemistry of human physiology. Clinical aspects of the subject are treated with reference to the need of prospective medical students. Two recitations and six laboratory hours. 4 s.h.

Prerequisites, Chemistry 30 and 151-152. Course 261-262 is desirable though not required.
244. Metabolism.-Open to students who have completed course 242 or its equivalent, and who have a reading knowledge of German. Lectures and collateral reading deal with the probable fate of foodstuffs in the body, the nitrogen balance, energy requirement, nutritive ratios, vital factors, and ductless glands. The laboratory work consists mainly of blood analysis under both normal and pathological conditions. The laboratory work of this course without the lectures may be taken by students who have passed Chemistry 241. In this case only two semesterhours credit will be given. Two recitations and six laboratory hours. 4 s.h.

Professor Wilson

251-252. Intermediate Organic Chemistry.-Intended for students who have had elementary organic chemistry but whose preparation is insufficient for Chemistry 253-254 or research, and to meet the minor requirements of graduate students in other departments. Three recitations. 3 s.h. Assistant Professor Bigelow

253-254. Advanced Organic Chemistry.-A continuation of Chemistry 151-152, including discussion of the theories of organic chemistry. The laboratory work will include preparations of the more difficult type, requiring reference to the original literature. One lecture and nine laboratory hours. 8 s.h. Assistant Professor Bigelow and Dr. Hauser

Prerequisites, Chemistry 151-152 or equivalent and a reading knowledge of German.
256. Organic Analysis.-The elements of organic qualitative and quantitative analysis, primarily for students taking organic research. Nine laboratory hours. One semester to be arranged with the Department. $\boldsymbol{3}$ s.h. Assistant Professor Bigelow and Dr. Hauser Prerequisite, Chemistry 151-152 or equivalent.
289. Teaching of Chemistry.-Members of this course spend from 3 to 6 hours a week in laboratory instruction, each having supervision of about 24 students. The members of the course also meet one hour a week for lecture, conference, or recitation. In addition to the above hours, they prepare the regular work of the course in which they are supervising, correct laboratory notebooks, and do the reference reading and study necessary for the conference hour. One semester to be arranged with the Department. 2 or 3 s.h.

Professor Wilson
(The amount of credit depends on whether 3 or 6 hours are spent in the laboratory in addition to the conference hour.)
271. Introduction to Research.-Lectures on the use of chemical literature, research methods, recording and publication of results, preparation of theses and other topics. One lecture. 1 s.h.

273-274. Research.-The aim of this course is to give instruction in methods used in the investigation of original problems. Nine hours a week, laboratory and conferences. 3 or 6 s.h.

## Professors Gross and Wilson, Assistant Professors <br> Vosburgh and Bigelow, and Dr. Hauser

Students may elect the first semester without taking the second. The amount of credit will depend on whether the course is pursued for one or two semesters. It is open to seniors who have had courses 30, 151152, and 261-262.

275-276. Seminar.-Open to seniors qualifying for honors in the department and required of all graduate students in chemistry. One hour a week discussion. 2 s.h.

## DEPARTMENT OF ECONOMICS AND POLITICAL SCIENCE

PROFESSORS GLASSON, COTTON, HOOVER,* WILSON, AND HAMILTON,* ASSOCIATE PROFESSOR RANKIN, ASSISTANT PROFESSORS LANDON, GRAY, ROBERTS, AND TOWE, AND MESSRS. SHIELDS, HARVILL, RATCHFORD, SIMPSON, SMITH, ASHBURN, HAGAN, SHARKEY, AND WHITMAN

This department offers instruction in general economics, business administration, and political science. The general course in economics affords a survey of the whole field of economic thought and lays the foundation for specialized study in various branches of the subject. Advanced courses are offered in theoretical and applied economics.

A special group of studies is provided for candidates for the bachelor of arts degree who are definitely looking forward to a business career at the conclusion of their college course. This group is described as Group II in "Business Administration" in this catalogue. While Group II is mainly composed of liberal rather than technical studies, it gives opportunity in the junior and senior years for specialized study in such subjects as money and banking, public and corporation finance, investments, railroad and water transportation, marketing, insurance, industrial management, accounting, and business statistics.

In political science, the department offers courses which deal with the nature, origin, and functions of the state and which give detailed consideration to the political institutions of the United States, England, and other countries. Courses are also offered in political theory, international government and relations, state government, and city and county government.

Unless otherwise specified, courses are offered throughout the year.

## ECONOMICS AND BUSINESS ADMINISTRATION

## PRIMARILY FOR FRESHMEN

A. Description of Modern Industry; Economic Geography.-This course aims to furnish beginners with a background of information preparatory to the study of general economics. It is required of Freshmen in the Business Administration Group and is open to Freshmen in some of the other groups. 6 s.h.

Assistant Professor Landon
FOR SOPHOMORES AND JUNIORS

1. Principles of Economics.-This course must be taken by all students planning to elect further courses in economics and business administration. 6 s.h. Professors Hoover and Hamilton, and Assistant Professors Roberts, Gray, and Landon, and

Messrs. Harvill and Smith
FOR JUNIORS
115. Economic Geography; Teachers' Course.-This course is not open to students who have received credit for Economics $A$. Recommended for

[^65]all students in Teaching Group, Class C. An introductory study of the relations existing between geographic conditions and the various types of activity by means of which man gains a living. An intensive study of North America. First semester. 3 s.h. Assistant Professor Landon
116. Economic Geography and Industrial Organization.-This course is not open to students who have received credit for Economics A. Recommended for all students in Teaching Group, Class C. An intensive study of major industries as affected by geographic environment. Prerequisite, course 115. Second semester. 3 s.h. Assistant Professor Landon

## FOR JUNIORS AND SENIORS

[Note: The attention of students who are taking, or who propose to take, courses 104, 144, 105, 158 is called to Mathematics 21, "Mathematics of Investment." This course is recommended as an elective for Sophomores or Juniors.]
104. Corporation Finance.-A study of the growth of corporations, their organization and securities; methods of financing; problems connected with the management of capital and the distribution of earnings; the promotion and financing of corporate consolidations; corporate insolvency and reorganization. First semester. 3 s.h. Mr. Ratchford

Prerequisite, course 1.
144. Investment and Speculation.-The accumulation of capital. The different types of investment securities. Investment banking. The stock exchange and its functions. Taxation of investments. Analysis of investments. Second semester. 3 s.h.

Mr. Ratchford
Prerequisite, course 1.
105. Industrial Management and Business Forecasting.-The general idea of costs and the different classes of costs. The business cycle and forecasting business conditions; the control of an industry in the business cycle. The Harvard Index of General Business Conditions and the Babson and Brookmire economic and statistical services are used and reported on by the students. First semester. 3 s.h. Professor Cotton
158. Insurance.-Introduction to actuarial science. A general course dealing with life, fire, health, and accident insurance; employer's liability; workmen's compensation; credit and automobile insurance; and also with bonding companies. Insurance accounting. This course is designed to give a knowledge of the chief principles and practices of insurance. A standard textbook is used. Second semester. 3 s.h.

Professor Cotton
106. Railway, Ocean, and Inland Waterway Transportation.-History of the development of railways in the United States. Railway organization and finance; traffic management; federal and state regulation of railroads; the present status of the railroad problem. Inland water trans-
portation. Ocean transportation. Collateral reading and the preparation of term papers are required. 3 s.h.

Mr. Harvill
[Not offered in 1930-31]
168. Marketing Problems.-This course is designed to study the marketing of staple crops such as cotton and wheat. It also deals with the coöperative marketing of a variety of commodities. Particular attention is given to the marketing of the cotton crop. A study is made of the methods of trading and functions of the New York, New Orleans, and Liverpool Cotton Exchanges. Collateral reading and the preparation of term papers are required. 3 s.h.

Mr. Harvill
[Not offered in 1930-31]

## FOR SENIORS AND GRADUATES

203. Money and Banking.-After a preliminary study of monetary history and theory, together with an account of the development of credit instruments, there follows a more extended presentation of the theory and practice of banking. First semester. 3 s.h.

Professor Glasson and Mr. Ratchford
Students who elect this course must have made a creditable record in course 1.
235. Public Finance.-This course deals with public expenditures, public revenues, public debts, and financial administration. Second semester. 3 s.h.

Professor Glasson and Mr. Ratchford
Students who elect this course must have made a creditable record in course 1.
237. American Federal Finance.-A survey of the organization and methods of contemporary American federal finance with special attention to tariff revision, public debt administration, and budgetary procedure. First semester. 3 s.h. Assistant Professor Gray
[By special permission, Seniors may substitute course 237 for course 235]
238. Industrial and Financial History of the United States.-The development of American industrial and financial institutions and their economic and ideological backgrounds. Second semester. 3 s.h.

Assistant Professor Gray
[By special permission, Seniors may substitute course 238 for course 203]
239. Statistical Methods.-Statistical analysis as a tool in investigation; its limitations, and the interpretation of statistical results. Methods especially applicable to economic data are given most attention. Two hours lecture and one laboratory period. First semester. 3 s.h.
[Not offered in 1930-31]
Assistant Professor Gray
240. Statistical Analysis of Time Series.-A study of so-called business "cycles" and "barometers" and the analysis of other periodic economic
phenomena. Prerequisite, course 239. Two hours lecture and one laboratory period. Second semester. 3 s.h.
[Not offered in 1930-31] Assistant Professor Gray
254. Trade Unionism and Labor Problems.-Economic and industrial conditions that have given rise to unionism. A brief history of unionism in England and the United States. The structure, methods, and policies of modern unions. First semester. 3 s.h. Professor Cotton
[By special permission, Seniors may substitute course 254 for course 106]
255. Industrial Relations.-This course deals with the fundamental principles underlying industrial relations. Policies and plans of the management concerning employees are discussed. The class will study the organization of the labor department of various industries. Course 254 is a prerequisite for this course. Second semester. 3 s.h.

Professor Cotton
[By special permission, Seniors may substitute course 255 for course 168]
265. International Trade.-An analysis of the theoretical principles underlying international trade together with an historical study of the foreign trade and tariff policies of the United States, France, Germany, and England down to 1914. First semester. 3 s.h.

Assistant Professor Roberts
266. Foreign Trade and Recent Commercial Policy.-A study of the influence on foreign trade of post-war protectionism, war debts, international capital movements, and inconvertible paper money. Practical problems in buying and selling abroad. Special attention given to Latin America. Second semester. 3 s.h. Assistant Professor Roberts
214. Economic Systems.-A study of alternative economic systems. In addition to an analysis of communism, anarchism and the variants of socialism, the course will include a consideration of other proposed modifications of the existing economic order. First semester. 3 s.h.

Professor Hoover
215. Economic Functions of the State.-A consideration of the primary and secondary economic functions of government and of the legislation which provides for the performance of these functions, such as social legislation and the regulation of commerce and industry. Second semester. 3 s.h.

Professor Hoover

FOR GRADUATES AND SENIORS BY SPECIAL PERMISSION
210. History of Political Economy.-This course traces the development of economic theory, giving special attention to the various schools of economic thought in England, France, Germany, and the United States. A large amount of collateral reading in the works of typical authors is required. Lectures and class-discussions. 6 s.h.

Assistant Professor Roberts
212. Value and Distribution.-This course is designed to introduce stadents to some of the more complex aspects of economic theory. Controversial phases of theory are surveyed through the medium of the works of the foremost modern economists. The course will also serve as a general review of economic theory for graduate students. 4 s.h.

Professor Hoover* and Assistant Professor Roberts
349. Research in Corporation Organization and Finance.-Open to graduate students and, by special permission, to Seniors who have completed creditably courses 104 and 144. Second semester. 2 s.h.

Professor Glasson

## ACCOUNTANCY AND BUSINESS LAW

FOR SOPHOMORES
7. First-Year Accounting.-Elementary principles of single proprietorship, partnership, and corporation accounting. Supervised laboratory periods will be assigned. 6 s.h.

Professor Cotton and Messrs. Shields and Whitman
FOR JUNIORS AND SENIORS
72. Second-Year Accounting.-Advanced theory applied to the accounting process. Open to students who have completed Accounting 7. 6 s.h.

Mr. Shields
[Students specializing in Accounting may substitute this course for courses 105 and 158]

## FOR SENIORS

173. Auditing.-Theory and practice of balance sheet and detailed audits and special investigations. Students admitted to the course by permission of the instructor. First semester. 3 s.h. Mr. Shields
174. C. P. A. Problems.-Practical accounting problems, auditing, analysis and theory of accounts in preparation for the Certified Public Accountant examination. Students admitted to the course by permission of the instructor. Second semester. 3 s.h.

Mr. Shields
176. Income Tax Accounting.-A study of federal and state income tax laws; problems in the preparation of tax returns and claims for refund. First semester. 3 s.h.

Mr. Shields
177. Modern Accounting Systems.-Systems and the forms for recording data of basic manufacturing industries, banks, building and loan associations, estates, and municipalities. Special attention will be paid to budgetary accounting. Second semester. 3 s.h. Mr. Shields
178. Business Law.-The fundamental principles of law as applied to common business transactions. The topics presented are: contracts, agency, bailments, sales, negotiable instruments, partnership, corpor-

[^66]ations, and bankruptcy. Textbook: Bays, Business Law. Casebook: Bays, Cases on Commercial Law. Required of Seniors in the Business Administration group. 6 s.h.

Assistant Professor Towe
FOR SENIORS AND GRADUATES
275. Advanced Industrial Accounting and Management.-This course traces the ways and means of executive control through statistics and industrial accountancy. Emphasis is put upon the economics of overhead costs. A complete practice set of cost accounting is worked by each student during the course. 6 s.h.

Professor Cotton
Courses 105 and 7 are ordinarily prerequisites for this course.

## political science

FOR JUNIORS

102. American Government and Politics.-A brief preliminary study of political organization in general is followed by a more detailed study of the American political system. The subject matter includes the several departments of the national government, the structure and functions of state governments in the United States, and the political organization of smaller areas in America. 6 s.h.

Professor Wilson, Associate Professor Rankin, and Mr. Simpson
Course 102, which may be taken whether or not course 1 has been taken, is ordinarily prerequisite for any other course in political science; students who have not had this course or its equivalent, may be admitted to other courses in political science by approval of the individual instructors concerned.

## FOR SENIORS AND GRADUATES

228. American Political Institutions.-A study of the formation and development of the institutions of the national government in the United States. Federal organs of government are treated historically and analytically. 3 s.h.

Associate Professor Rankin
[Not offered in 1930-31]
225. American Political Parties and Practical Politics.-A study of the historical development, organization, and methods of political parties in the United States. Special attention is given to current American politics. First semester. 3 s.h.

Associate Professor Rankin
226. Parliamentary Government.-This course, being a comparative study of popular government in modern states, deals particularly with the political systems of the British Empire, France, Germany, and Switzerland. Second semester. 3 s.h.

Associate Professor Rankin
208. American Constitutional Law and Theory.-Attention is given to leading constitutional principles of American government, as developed through judicial interpretation. Emphasis is placed upon problems of current importance. Lectures, reading of cases, assigned legal problems. First semester. 3 s.h.

Professor Wilson
264. Railroad Regulation in the United States.-A brief consideration of the general problem of governmental regulation of railroads is followed by a more intensive study of the powers and activities or regulatory bodies, state and federal. The latter part of the course deals with an analysis of the Transportation Act of 1920 and its administration up to the present time. Second semester. 3 s.h. Professor Wilson
209. State Government in the United States.-The subject-matter covers the historical development of government in the states of the Union, the present political organization, and relations between state and federal government. First semester. 3 s.h. Associate Professor Rankin
294. City and County Government.-A study of the general problems of city government in the United States and in Europe. The latter part of the course is devoted to a study of county government in the United States, with particular reference to North Carolina. Second semester. 3 s.h.

Associate Professor Rankin
223. Political Thought to the Seventeenth Century.-In the course of a survey of political thought from the time of Plato and Aristotle to the seventeenth century, special emphasis is placed upon the development of important concepts in political theory. First semester. 3 s.h.

Professor Wilson
[Not offered in 1930-31]
224. Modern Political Theory.-The political theories of Hobbes, Locke, Rousseau, Montesquieu, Harrington, Burke, and John Stuart Mill are studied with particular reference to their influence upon American political thought. The latter part of the course deals with socialism and the modern idea of the state. Second semester. 3 s.h. Professor Wilson
[Not offered in 1930-31]
227. International Law and International Organization.-Elements of international law and the application of principles through recent judicial interpretation and in international negotiations. Particular attention is give to the manner in which the law has been interpreted and applied by the United States. The League of Nations and the Permanent Court of International Justice are studied in some detail. 6 s.h.

Professor Wilson

## DEPARTMENT OF EDUCATION

PROFESSORS HOLTON, PROCTOR, AND CHILDS, VISITING PROFESSOR TROTH, ASSOCIATE PROFESSOR CARR, ASSISTANT PROFESSOR DIMMITT, AND MRS. SMITH, MR. MAJOR, MR. GODARD, MR. MCEWEN, MISS GRAY, AND MISS SOUTHERLAND
The purposes of the Department of Education are (1) to develop greater appreciation of the value of the school as an institution; (2) to impart a knowledge of educational principles and methods of teaching; (3) to acquaint the student with the status of elementary and secondary
education of the present day and to equip him for service in these fields as superintendent, supervisor, principal, or teacher; (4) to make a careful study of educational conditions and needs in North Carolina and in the South.

Courses in the department are designed for three groups of students: (1) students with teaching experience or others who have definitely chosen teaching as their life work; (2) Juniors and Seniors who desire to study the school as an outstanding social institution; and (3) teachers whose work will permit them to enroll in Saturday and afternoon classes.

Students who do not expect to teach but merely desire an understanding of the school as part of a liberal education are advised to elect such courses as 54 and 105 for their introductory work in the department and then to elect further work in accordance with their special interests. Students who expect to engage in the various phases of teaching should plan their courses in accordance with the general regulations for Group V as outlined in this catalogue, p. 41.

## FOR FRESHMEN

0. Orientation Course in Study and Study Habits.-A course for freshmen whose high school and other records indicate the need of help in working out a satisfactory method of study. The factors of study, the use of text-books, note-taking from lectures and parallel readings, and applications of the factors of study to the daily problems of the student are among the matters considered. Either semester. 3 s.h.

Professor Proctor, Assistant Professor Dimmitt, Messrs. Major and Godard

FOR FRESHMEN AND SOPHOMORES
8. The Learning Process.-A course in elementary educational psychology, required of all freshmen and sophomores entering Group V. Either semester. 3 s.h.

Professor Childs and Assistant Professor Dimmitt

## FOR SOPHOMORES WHO HAVE HAD COURSE 8, AND FOR JUNIORS

10. Introduction to Teaching.-A survey of the work of the teacher intended to assist the pupil in choosing intelligently some field of teaching work for future specialization. Topics: qualification and training of teachers, nature and aims of education, nature and purpose of public school curricula, nature of subject-matter and its relation to pupil activity, modern classroom procedure in teaching. Either semester. 3 s.h.

Associate Professor Carr
For sophomores who have had course 10 and for juniors
54. Introductory Course in the History of Education.-A study of the types of educational systems and institutions evolved in western Europe and the United States as an introduction to current educational problems. Either semester. 3 s.h.

Professor Holton, Visiting Professor Troth, and Mr. McEwen
105. Introduction to Educational Sociology.-A study of social forces, processes, and values as affecting education, and the interaction of school and community. Either semester. 3 s.h.

Professor Childs and Mr. McEfen

## FOR JUNIORS

103. School Organization and Administration for the Classroom Teacher.-A study of the problems of school organization, control, and administration as they arise in the work of the classroom teacher. Either semester. 3 s.h. Visiting Professor Troth
104. Educational Implications of Genetic Psychology.-A course tracing the development of the individual through the stages of growth and learning, with emphasis upon early and later childhood, the development of such behavior patterns as play, language, etc., the process of socialization and similar material of especial significance to teachers in the elementary schools. First semester. 3 s.h. Professor Brownell

## FOR JUNIORS AND SENIORS

102. Methods of Teaching and Presentation of Subject-Matter in the Primary School.-A study of materials and methods in the mother-tongue, writing, and number in the primary grades. A minimum of fifteen laboratory periods of observation and practice-teaching. First semester. 3 s.h.

Associate Professor Carr and Miss Gray
112. Methods of Teaching and Presentation of Subject-Matter in the Primary School.-A study of materials and methods in the primary subjects other than language, reading, writing, and arithmetic. A minimum of fifteen laboratory periods of observation and practice-teaching. Second semester. 3 s.h.

Associate Professor Carr and Miss Gray
107. Methods of Teaching and Presentation of Subject-Matter in the Grammar Girades.-A study of materials and methods in the language, reading, and arithmetic of the grammar grades. A minimum of fifteen laboratory periods of observation and practice-teaching. First semester. 3 s.h. Associate Professor Carr and Miss Southerland
117. Methods of Teaching and Presentation of Subject-Matter in the Grammar Girades.-A study of materials and methods in the grammar grade subjects other than language, reading, and arithmetic. A minimum of fifteen laboratory periods of observation and practice-teaching. Second semester. 3 s.h. Associate Professor Carr and Miss Southerland
106. Principles of Secondary Education.-A study of the nature and scope of secondary education, emphasizing an introduction to the professional literature in the field. Either semester. 3 s.h. Professor Childs
108. Mental Tests and Applications.-A study of the development of intelligence testing, the conception of general intelligence, and various recent applications of mental tests. First semester. 3 s.h.

## Assistant Professor Dimmitt

109. Educational Measurements.-A study of the purposes and uses of standardized tests and scales with special emphasis on their use in the improvement of instruction. 3 s.h. Assistant Professor Dimmitt
[Not offered in 1930-31]

## FOR SENIORS

116. General Methods in the High School: Observation and Practice Teach-ing.-A required course in Group V, Class B, open only to Seniors who have completed or are carrying course 106. Either semester. 3 s.h.

Visiting Professor Troth and Mr. McEfen
126. The Teaching of Physical Education.-Identical with Physical Education 102. The course counts as half-credit in the Department of Education for students who have had or are carrying Education 106 or 116 or other approved course in secondary education. Second semester.

Miss Grout

## FOR SENIORS AND GRADUATES

207. Technique of Teaching.-An advanced course in the teaching process, dealing with the theory underlying sound technique and applied specifically to the work of the elementary school. Prerequisite: teaching experience or six semester-hours of work in materials and methods. First semester. 3 s.h.

Assoclate Professor Carr
209. Statistical Methods Applied to Education.-A study of statistical methods of treating educational and social data designed to enable teacher or administrator to interpret and use the results of scientific investigations in education. Second semester. 3 s.h.

## Assistant Professor Dimmitt

206. Psychological Principles of Secondary Education.-A study of adolescence and the psychology of learning as applied to teaching the principal high school subjects. 3 s.h.

Professor Childs and Visiting Professor Troth
[Not offered in 1930-31]
200. Introduction to the Philosophy of Education.-A consideration of fundamental concepts underlying educational theory. First semester. 3 s.h.

Professor Holton
[Not offered in 1930-31]
212. The Curriculum and Materials of the Elementary Grades.-A study of curriculum problems in the elementary school. First semester. 3 s.h. Associate Profsssor Carr
[Not offered in 1930-31]
253. Legal Phases of School Administration.-A study of judicial decisions and the development of outstanding features of statute law controlling school administration, with special emphasis upon North Carolina materials. Second semester. 3 s.h. Professor Holton
244. Studies in the Historical Development of Public Schooi Administration. -An advanced course devoted to the development of public school administration in the South, with especial reference to North Carolina as a type. First semester. 3 s.h.

Professor Holton
[Not offered in 1930-31]
214. History of Education in the United States.-A study of the development of the American public school and the interaction of higher education and the public school. First semester. 3 s.h. Professor Holton
205. Sociologicai Foundations of the Secondary Schooi Subjects.-A consideration of the aims and objectives of secondary school subjects, emphasizing practical problems of curriculum-making in the high school. Prerequisite: six semester-hours in education, including course 105. First semester. 3 s.h.

Professor Childs
215. Principles of Vocationai Guidance.-A study of the objectives and underlying principles of vocational education, emphasizing this phase of education in North Carolina and the South. The study seeks to formulate a working program for vocational counsellors and others whose teaching function will involve problems of vocational and educational guidance. Prerequisite: six semester-hours in educational sociology, preferabiy courses 105 and 205. Second semester. 3 s.h.

Professor Childs
[Not offered in 1930-31]
17. The Social and Economic Position of Women.-A course in vocational guidance for women that counts as a general elective, but not ag part of either a major or minor in Education or toward a North Carolina state teacher's certificate. The purpose of the course is to give the historical background of the changing social and economic position of women, the contributions made by outstanding women, and the vocational opportunities open to women. Second semester. 2 s.h. Mrs. Smiti
225. Rarai Sociology.-A study of rural life with emphasis upon the social and economic forces which apply to the life of the rural community. Second semester. 3 s.h. Professor Childs
[Not offered in 1930-31]
235. Principles of Vocational Education.-A study of the social basis for vocational education; a brief review of the developments in the field up to the present time; an examination of the present practices in the main fields of agricultural, commercial, industrial, and home-making vocational education. Second semester. 3 s.h. Professor Childs
213. Secondary School Organization and Administration.-A study of the outstanding problems of secondary school organization and administration other than the problem of gradation and classification of pupils. Second semester. 3 s.h.

Professor Proctor
226. The Teaching of High School History.—Identical with History 212. The course counts as an elective in the Department of Education only when approved by the Department and the instructor. 6 s.h.

Associate Professor Shryock
246. The Teaching of Mathematics.-Identical with Mathematics 204. The course counts as an elective in the Department of Education only when approved by the Department and the instructor. Second semester. 3 s.h.

Professor Rankin
219. Experimental Education.-An introduction, including a brief historical survey of the field, to some of the most important problems and methods in experimental education. Experiments and reports in the general field of learning, the psychology of the school subjects, and related fields. 3 s.h.

Professor _-_
[Not offered in 1930-31]
222. Methods of Teaching and Supervising the Fundamental Subjects.-An advanced course for teachers in service and for students who have completed at least twelve semester-hours of work in education. Second semester. 3 s.h.

Associate Professor Carr
[Not offered in 1930-31]
224. Current Problems in Public Education as Revealed Throngh School Surveys.-A study of recent developments in public education as revealed through school surveys and resulting from the survey movement. First semester. 3 s.h.

Professor Holton
[Not offered in 1930-31]
254. History of Secondary Education in the United States.-A study of historical and comparative conceptions of the secondary school, changes in American life affecting the secondary school, present status of the secondary school, current tendencies toward expansion, and the problem of state and federal aid. First semester. 3 s.h. Professor Proctor
[Not offered in 1930-31]
228. Psychology of Learning.-A study of different types of learning, the principles which underlie successful guidance of learning, methods and conditions of learning, individual differences, etc. Constant reference to experimental literature. First semester. 3 s.h.

## Assistant Professor Dimmitt

232. Elementary School Supervision.-A survey of supervision as a means of improving instruction and adapting the curriculum to child and community needs. Second semester. 3 s.h. Associate Professor Carr
233. Administrative Pupil Accounting.-An advanced study of gradation and classification of pupils, with incidental attention to the keeping of records and the making of reports. The study includes a consideration of individual differences, promotions, acceleration, and retardation of pupils; the various plans for classification and gradation; interpreting the results of tests; and some practice in the computation of statistical measures. First semester. 3 s.h.

Professor Proctor
234. Recent Movements in American Education.-An intensive study of educational thought and practice since 1900. First semester. 3 s.h.

Professor Holton
[Not offered in 1930-31]
FOR TEACHERS IN SERVICE AND FOR OTHER STUDENTS BY PERMISSION
Teachers are referred to such courses listed for Seniors and Graduates on this page and preceding pages, as may be scheduled for late afternoon hours and Saturday periods. Graduate teachers will find other courses in the graduate section of the annual catalogue and in the graduate bulletin. Undergraduate courses are offered when there is sufficient demand from teachers in the elementary schools.

## DEPARTMENT OF CIVIL AND MECHANICAL ENGINEERING

## Asbury Building <br> PROFESSORS BIRD, HALL, AND MR.

With the exception of course 10, odd-mumbered courses are offered in the first semester, even-numbered courses in the second semester.

## DRAWING

1-2. Engineering Drawing.-Orthographic projection, lettering, pictorial representation, intersections, and developments. 4 s.h.

Messrs. Bird and Mr. $\qquad$
3. Descriptive Geometry.-Problems relating to point, line, plane, solid. Prerequisite, course 1-2. 2 s.h.

Mr.

## MECHANICS

6. Mechanics.-Concurrent forces, parallel forces, non-concurrent and non-parallel forces, centroids, friction, moment of inertia, translation, rotation, work, energy, momentum. Prerequisite, Mathematics 25.4 s.h. Mr. Bird
7. Hydraulics.-Hydrostatics; flow of water through orifices, weirs, pipes, and open channels; general principles of water wheels and turbines. Prerequisite, course 6. 4 s.h.

Mr. Hall
108. Strength of Materials.-Elastic bodies under stress; flexure of simple, overhanging, fixed, and continuous beams; columns; combined stresses; etc. Prerequisite, course 6. 3 s.h. Mr. Bird
109. Materials of Engineering.-Study and testing of materials. One class and one three-hour laboratory period weekly. 2 s.h. Mr. Bird

## CIVIL ENGINEERING

10. Plane Surveying.-Exercise in use of chain, tape, compass, level, transit, and plane-table; surveys and resurveys. Eight hours a day, three weeks. Summer school. 3 s.h.

Messrs. Bird and Hall
[For fee for this course, see bulletin of the Summer School.]
11. Plane Surveying.-Care and adjustment of instruments, differential and profile leveling, use of sextant, transit surveys. Prerequisite, 10. 2 s.h.

Mr. Hall
112. Curves and Earthwork.-Simple, compound, and easement curves, earthwork computations, and mass diagrams as applied to highway work; observations on Sun and polars for latitude, time, and azimuth. 3 s.h.

Mr. Hall
114. Advanced Surveying.--Field work in connection with course 112. Slope staking, earthwork, simple and compound curves; determination of meridian by observations on Polaris and Sun. Concurrent with course 112. 3 s.h.

Mr. Hall
115. Highway Engineering.-Location, construction, and maintenance of roads and pavements; dust prevention; road economics. 2 s.h.

Mr. Hall
116. Highway Engineering.-Testing of cement, sand, stone, gravel, and bituminous materials. 2 s.h.

Mr. Hall
117. Railroad Engineering.-Construction and maintenance of track and track-work, economics, operating conditions affecting location. 3 s.h.

Mr. Bird
122. Hydrology.-Factors affecting precipitation, evaporation from land and water surfaces, relation of precipitation to run-off, estimating runoff, floods and flood flows, applications of hydrology. Prerequisite, course 107. 3 s.h.

Mr. Hall
123. Public Water Supply.-Quantity and quality of water required, hydraulics of wells, reservoirs, works for purification and distribution of water, tests and standards of purity of water for drinking purposes. Prerequisite, course 122. 2 s.h.

Mr. Hall
124. Sewerage.-Sewerage systems, rainfall and storm water flow, size of storm and sanitary sewers, sewage disposal. Prerequisite, course 122. 2 s.h.

Mr. Hall
131. Steel Structures--Stresses.-Roofs, parallel chord bridges under all types of loads, inclined top chord bridges including sub-divided panels, wind bracing. Prerequisite, course 6. 3 s.h.

Mr. Bird
182. Steel Structures-Design.-Built beams, plate girders, tension members, compression members, tension and compression members, end posts, stringers, floor beams, pins, plates, etc. Drafting. Prerequisites, courses 108,131 . 4 s.h.

Mr. Bird.
133. Reinforced Concrete.-Theory and design of reinforced concrete beams, slabs, columns. Prerequisite, course 108. 3 s.h. Mr. Bred
134. Masonry Structures.-Ordinary foundations, dams, retaining walls, arches, piers, abutments. Prerequisites, courses 108, 133. 3 s.h.

Mr. Bird
240. Indeterminate Structures.-Introductory course dealing with the application of theory of least work, deflection, and rotation to indeterminate stresses. Problems are solved analytically, graphically, and by deformeter. Prerequisite, course 131. 3 s.h.

Mr. Bird

## MECHANICAL ENGINEERING

81. Elements of Mechanism.-A short course covering revolving and oscillating bodies, drives, transmissions, gears, gear trains, cams, linkages, and miscellaneous composite mechanisms. Prerequisite, Freshman Mathematics. 2 s.h.

Mr.
183-184. Elementary Thermodynamics and Heat Engines.-Introduction to the principles and applications of thermodynamics. A study of the properties of steam and the equipment for its generation and utilization, with some time spent on the internal-combustion engine. Inspection trips are made to neighboring power plants. Prerequisites, Physics 53-54, Mathematics 25, 30 (or concurrent). 6 s.h. Mr.

# DEPARTMENT OF ELECTRICAL ENGINEERING 

Asbery Building
PROFESSORS SCHEALER AND SEELEY
151-152. Principles of Electrical Engineering.-An elementary course covering direct and alternating currents and the fundamental principles of direct and alternating current machinery. This course serves as a general introductory course for electrical engineering students. Prerequisites, Physics 53-54, Mathematics 25,30 (or concurrent). 8 s.h.

Mr. Seeley
153. Principles of Electrical Engineering.-A short elementary course covering the principles of direct current and alternating current machinery, especially designed for students in civil engineering. Prerequisite, Physics 53-54. 3 s.h.

Mr. Schealer
155. Principles of Electrical Engineering: Advanced Direct Current Machin-ery.-A study of the principles which underlie the design and operation of all types of direct current machinery. Prerequisites, course 151-152, Mathematics $25,30.3$ s.h.

Mr. Schealer
157. Principles of Electrical Engineering: Advanced Alternating Currents.The algebra of vectors and complex quantities used in electrical engineering. An advanced course in alternating currents and alternating current circuits. Prerequisites, course 151-152, Mathematics 25, 30. 3 s.h.

Mr. Schealer
154. Principles of Electrical Engineering: Advanced Alternating Current Machinery.-The principles underlying the construction and operation of alternating current machinery. A study of synchronous generators and motors, parallel operation of alternators, polyphase and single phase induction motors, series and repulsion motors, synchronous converters, static transformers. Prerequisite, course 157. 6 s.h. Mr. Schealer
159. Electric Power Transmission.-A course of lectures and recitations on the factors involved in the transmission of electrical energy over long distances and the use of hyperbolic functions in the solution of transmission line problems. Concurrent with course 157. Prerequisite, course 151-152. 3 s.h.

Mr. Schealer
156. Electric Railways.-A course of lectures and recitations relating to the construction, operation, and equipment of different types of electric railways. Prerequisites, courses $151-152,155$. 3 s.h.

Mr. Schealer
161-162. High Frequency Alternating Currents.-An advanced course on the principles of wire and wireless communication. A thorough study is made of the theory of coupled circuits, antenna radiation, wave propagation over metallic circuits, nature of speech and sound, vacuum tubes, vacuum tube circuits, wire and wireless telephone circuits. Prerequisite, Mathematics 231. 6 s.h.

Mr. Seeley
158. Electric Power Stations.-A course of lectures and recitations pertaining to the design, construction and operation of electric power stations, both steam and hydraulic. Consideration of prime movers; generating machinery; powdered fuel and stoker equipment; switchboards; instruments and protective devices; operation and management; visits to neighboring plants. Prerequisites, courses $151-152,183-184.3$ s.h.

Mr. Schealer

## DEPARTMENT OF ENGLISH

professors brown, gilbert, white, baum, hubbell, greene,* and chase, associate professor mitchell, messrs. jordan, blackburn, $\dagger$ patton, Ward, gregory, and sugden, mrs. vance, and mrs. white

Odd-numbered courses are offered in the first semester, even-numbered courses in the second.

* Absent on leave, 1929-1930.
$\dagger$ Absent on leave, 1930-31.

1-2. English Composition and English Poetry.-During the first semester the work of the course consists chiefly of composition; during the second term it is divided between the study of literature and writing. 6 s.h.

Associate Professor Mitchell, Messrs. Jordan, Blackburn, Patton, Ward, Gregory, and Sugden, and Mrs. Vance
Students who receive a grade of 75 or more in the work of composition of both semesters and a grade of 75 or more in the work in literature are transferred on recommendation of their instructors to sections of English 5-6 for work in English during their sophomore year. Those whose grades in the work of composition of both semesters fall between 70 and 75 are transferred for work in English during their sophomore year to sections of English 3-4. Those students who do not earn a grade of 70 in composition during the first semester are required to continue the study of composition during the second semester; if they earn the passing grade of 70 or more in the work of composition at the end of the second semester, they receive credit for the first half-year of work, and during their sophomore year they do the work of the second semester of English 1-2. Students whose grades in the work of composition for both semesters fall below 70 must repeat the entire course during their second year.

3-4. English Composition.-A second course in composition for Sophomores. 6 s.h.

Mr. Jordan
Students who are required to take English 3-4 may take English 5-6 as an elective.

5-6. Prose Literature.-This course consists of a reading and study of selected works of the best writers of prose. Lectures are given on the lives of the authors studied, the periods of literary history, and the origin and growth of the various types of prose literature. Special emphasis is placed upon the study of biography. 6 s.h.

Professor Greene, Messrs. Blackburn and Patton, and Mrs. Vance and Mrs. White
English 5-6 or 3-4 is required of all Sophomores; English 5-6 is open as an elective to all undergraduates who do not take it as a required course. Sophomores who passed English 1-2 with recommendation to sections of English 5-6 may take 3-4 as their required English in their second year and carry English 5-6 as an elective. English 5-6 or its equivalent is required of all students who do their major work in English.

101-102. Composition.-This is a practical course for students who desire a greater mastery of and facility in the use of the language than they get from English 1-2 and 3-4. 6 s.h.

Professor Mitchell
A student may take English 101 only, but only in rare instances may a student enroll in English 102 without having had English 101. Students who wish to take the other courses in composition must have credit for at least 101. Students who wish to take this course must have made a grade of 75 or more in English 1-2, or they must have credit for English 1-2 and English 3-4. The number of students in this course is limited to thirty, and all must have the consent of the instructor.

103-104. Composition.-This course offers further study and practice in composition to those who have done especially good work in English 1-2 and in English 3-4. 6 s.h.

Professor Hubeell
Students who enroll for this course must have the consent of the instructor, and they should have credit for both English 101 and 102; however, a student may enroll for either semester of course 103-104 without having had English 102.
[Not offered in 1930-31]
119. Stage Problems.-This course deals with all phases of play-producing, lighting, scenery, costuming, directing, and similar problems. 3 s.h.

Professor
[Not offered in 1930-31]
120. History of the Theatre.-This course deals with methods of playproduction in the various historical periods of dramatic literature. 3 s.h.

Professor
[Not offered in 1930-31]
121. Play-Producing.-This is a course in the actual presentation of plays. Attention is given to voice-cultivation, stage-business, and other problems. 3 s.h.

Professor
[Not offered in 1930-31]
122. Special Problems in Play-Production.-This course continues the work of English 121. Emphasis is placed on the presentation of plays representative of the various periods of dramatic history. 3 s.h.

Professor
[Not offered in 1930-31]
123-124. Shakespeare.-All of Shakespeare's plays are read; nine are studied critically in class. 6 s.h. Professor Brown
125-126. English Literature, 1798-1832.-This course consists of a study of representative English writers of prose and poetry from Wordsworth to Tennyson. 6 s.h.

Mrs. White
127-128. English Literature, 1832-1900.-This course consists of a study of the prose and poetry of the period, with special emphasis on the works of Tennyson and Browning. 6 s.h. Professors Greene and Chase

129-130. The History of the Novel in England.-6 s.h.
Mrs. Vance
131. The Drama, 1770-1892.-3 s.h.
132. The Drama, 1892-1928.-3 s.h.

Professor Hubbell
Professor Hubbell
133. Contemporary Poetry and Verse-Writing.-Beginning with a study of the elements and technique of poetry, this course proceeds to a general survey of twentieth-century poetry, giving special attention to the various modern forms and tendencies. 3 s.h. Professor White

No student may enroll in this course without the consent of the instructor; only a small number can be admitted.

[^67]134. Contemporary Poetry and Verse-Writing.-The work of this course consists chiefly of the writing of verse by members of the class and of criticism of the manuscripts by the class. 3 s.h. Professor White

Prerequisite, English 133.
No student may enroll for this course without the consent of the instructor; only a small number can be admitted.

135-136. Critical Study of Literary Masterpieces.-The first semester is devoted mainly to the essay and related forms ; the second, to other types, including narrative ar. 1 lyric poetry, the novel, and the short-story. 6 s.h.

Professor Baum
137-138. American Literature.-This course consists of wide reading in American prose and poetry. 6 s.h.

Professor Hubbell
201-202. Anglo-Saxon.-This course requires no previous study of Anglo-Saxon. The first semester is given to a study of Anglo-Saxon grammar and to the reading of Anglo-Saxon prose; the second semester, to the reading and interpretation of Beozulf. 6 s.h.

Professor Brown
203-204. Chaucer.-6 s.h.
Professor Baum
205-206. Middle English.-This course consists of an introduction to the study of early Middle English literature and of a study of the history of the English language. 6 s.h.

Professor Baum
Students may elect English 205-206 without having studied either Anglo-Saxon or Middle English.
[Not offered in 1930-31]
207-208. English Literature, 1400-1550.-6 s.h. Professor Baum
209-210. English Romances.-This course consists of a rapid reading of the chief romances of the Middle English period. 6 s.h.

Professor Baum
[Not offered in 1930-31]
211. English Literature, 1550-1625.-This course considers the most important non-dramatic literature from 1550 to 1625 except the works of Spenser. 3 s.h.

Professor Gilbert
212. English Literature, 1625-1660.-This course considers the most important works other than drama from 1625 to 1660 except the works of Milton. 3 s.h.

Professor Gilbert
213-214. The Ballad and Other Folk-Lore.-This course consists of an extensive study of the ballad and other ancient and modern folk-songs and of the other fifteen kinds of folk-lore as found in North Carolina and other sections of America. Much of the material used in the course is in manuscript form, and still other material studied is that collected by the class during the year; thus the student gets training in collecting and classifying songs and other forms of folk-lore. Each student is assisted in developing some subject pertaining if possible to conditions in his native section. 6 s.h. Professor Brown

215-216. The Drama of the Elizabethan Period.-A study of the drama in England from its beginnings to 1640.6 s.h. Professor Gilbert

217-218. Spenser and Milton.-An exhaustive study of the works of Spenser and Milton.

Professor Gilbert
[Course 217 will be offered the second semester, 1930-31]
219. English Literature, 1660-1744.—3 s.h. Professor White
220. English Literature, 1744-1798.-3 s.h. Professor White
221. The Drama in England, 1640-1770.-3 s.h. Professor Baum
[Not offered in 1930-31]
223-224. Studies in the Romantic Poets of the Early Nineteenth Century.This course considers in an exhaustive manner the works of some of the Romantic poets. 6 s.h.

Professor White
225-226. Studies in Victorian Literature.-This course considers in an intensive way the works of some of the most important writers of the period. 6 s.b.

Professors Greene and Chass
227. Literary Criticism.-A history of literary criticism to 1700 . 3 s.h.

Professor Gilbert
228. Literary Criticism.-A history of literary criticism from 1700 to the present. 3 s.h.

Professor Gilbert
229-230. American Literature.-This course considers in an exhaustive manner the works of some of the American writers. 6 s.h.

Professor Hubbell
231-232. The Teaching of Literature and Composition in the High School.This course is intended especially for those students who expect to teach in the high schools and for teachers in the city or county who desire instruction in the teaching of English. The work of the course includes consideration of methods and aims in the study of literature and the writing of English, the nature and values of the various kinds of literaature, the planning of the high-school course, and the study of the most important English classics in the high school curriculum. 6 s.h.

Professor Gilbert
This course is open also to teachers with experience.
[Not offered in 1930-31]

## argumentation and public speaking

FOR SOPHOMORES, JUNIORS, AND SENIORS
151. Public Speaking.-A course in the fundamentals of public speaking with emphasis upon the effective presentation of ideas. 3 s.h.

Mr. Herring
152. Argumentation.-A course dealing with the principles of argumentation and debating with special emphasis upon brief-making and prac-tice-speaking. Public questions are studied as parallel work. 3 s.h.

Mr. Herring

## DEPARTMENT OF GERMAN

PROFESSORS WANNAMAKER, KRUMMEL, AND VOLLMER, ASSISTANT PROFESSOR WILSON, AND DR. SHEARS
The Department of German attempts in the courses offered below to meet the needs of two classes of students, those intending to make a systematic and prolonged study of the German language and literature and those wishing to acquire a ready reading knowledge of modern German prose. The opportunity to write a great many exercises and see them carefully corrected, to take frequent dictations in German, and to hear the language spoken a part of each recitation-hour in the elementary courses ought to enable the student to understand a connected lecture in

German 1-2 and 3-4 are prerequisites for course 109-110 and all subsequent courses.

Odd-numbered courses are offered in the first semester, even-numbered courses in the second semester.

FOR ALL STUDENTS
1-2. Elementary German.-Pronunciation, grammar, and translation; dictation, easy prose, and poetry. 6 s.h.

Professors Wannamaker, Krummel, and Vollmer, Assistant Professor Wilson, and Dr. Shears

3-4. Intermediate German.-Grammar and composition; dictation; spoken German; reading of narrative and dramatic prose. 6 8.h.

Professor Krummel, Assistant Professor
Wilson, and Dr. Shears

## PRIMARILY FOR STUDENTS OF SCIENCE

107-108. Scientific German.-The translation and, as soon as possible, the reading without translation of modern scientific prose. 6 s.h.

Professor Wannamaker
PRIMARILY FOR JUNIORS
109-110. German Prose Fiction.-Origin and development of the German novel; reading and discussion of typical selections from representative authors of the various literary movements of the nineteenth century. Lectures and reports. 6 s.h. Professor Krummel

111-112. Introduction to the Classic Drama.-Selected plays from Lessing, Schiller, Goethe, and Kleist. 6 s.h. Assistant Professor Wilson
[Not offered in 1930-31]
113. Masterpieces of German Prose.-Brilliant, powerful prose from such geniuses as Heine, Grillparzer, and Kleist. 3 s.h.
114. German Lyrics and Ballads.-A study of one of the richest fields of German literature. 3 s.h.

Assistant Professor Wilson
115-116. German Drama of the Nineteenth Century.-A study of the leading dramatists from Kleist to Hauptmann. Lectures, collateral reading, and reports. 6 s.h.

Professor Krummel
[Not offered in 1930-31]
FOR JUNIORS AND SENIORS
117-118. Advanced Composition: Conversation.-Grammar-review, oral and written composition in German. Recommended for those who are specializing in German. 6 s.h.

Professor Krummel
[Not offered in 1930-31]
119-120. Great Epochs in German Literature.-The great epochs in German literature studied through English translations. Lectures, discussions, and collateral reading. (No knowledge of German required.) 3 s.h. if taken in only one semester. 6 s.h. Professor Vollmer

FOR SENIORS AND GRADUATES
201-202. Goethe.-This course is intended to acquaint the student with the methods of independent research while making a careful study of the author's most important works, with special emphasis upon the broader aspects of his ever-widening interests and literary activities. 6 s.h.

Professor Krummel
203-204. Leibnitz to Romanticism.-Eighteenth century German literature in its relation to contemporary European philosophy. Lectures, collateral reading. 6 s.h.

Professor Vollmer
205-206. Middle High German.-The language and literature of Germany's first classical period. Grammar and translation. First semester : Wright's Middle High German Primer, and Der arme Heinrich. Second semester: Das Nibelungenlied, Tristan und Isolde, or Parsival. 6 s.h. Professor Vollmer

## DEPARTMENT OF GREEK

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professor peppler, assistant professor johnson,*
    AND MR. TRUESDALE
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Courses 121-122, 141-142, and 131 are entirely in English and require no knowledge of the Greek language. The purpose in offering them is to give a wider circle of students some conception of the debt which modern civilization owes to the Greeks.

Odd-numbered courses are offered in the first semester, even-numbered in the second semester.

1-2. Course for Beginners.-6 s.h.
Mr. Truesdale
Open to all students.

[^68]3-4. Xenophon.-Anabasis, Books I-IV. 6 s.h.
Assistant Professor Johnson
Open to students who offer one unit of Greek for admission and to those who have completed course 1-2.

105-106. Homer.-Iliad, Books I-V1. 6 s.h. Professor Peppler
Open to students who offer two units of Greek for admission and to those who have completed courses 1-2 and 3-4 or their equivalent.

107-108. Plato.-Apology, Crito, and selections, together with collateral reading in the Memorabilia of Xenophon and in the Clouds of Aristophanes. Euripides.-One play, to serve as an introduction to Greek tragedy. 6 s.h.

Professor Peppler
Open to students who offer three units for admission and to others who have completed the required preliminary work.

117-118. Greek Prose Composition.-The character of this course is determined by the needs of the students who elect it. 2 s.h.

Professor Peppler
121-122. Greek Literature in English Translations.-The purpose of this course is to give a general survey of the life and civilization of the Greeks, especially to those who have never studied the language but wish to become acquainted with some of the choicest portions of the literature by the use of translations. It is, however, open as an elective to all Juniors and Seniors, whether they know Greek or not. First, the Iliad and the Odyssey are read in translation and illustrated with stereopticon views of the excavations and discoveries at Troy and other cities of the Mycenean age; then, many of the extant plays of the three great tragic poets are studied in English translations. 6 s.h.

Professor Peppler
The student may elect course i22, whether or not he has taken course 121.

141-142. Greek Art.-Illustrated lectures, study of the textbook, and other assigned reading. For the sake of historical perspective, a cursory account of art in the Stone Ages and in Egypt and Mesopotamia is given at the beginning of the course; then, some time is devoted to the art of prehistoric Greece. The principal objects of study are the sculpture and architecture of classic Greece. No knowledge of Greek is required. Open as an elective to Juniors and Seniors. 6 s.h.

Assistant Professor Johnson
Greek 131-Latin 132-Classical History.-First semester: History of Greece with brief introduction dealing with Oriental nations. Second semester: History of Rome. May be counted for credit either as Greek or as Latin or as History. Required of Greek majors. 6 s.h.

Professor Anderson

## FOR SENIORS AND GRADUATES

201-202. Greek Drama.-Selected plays are read, and their dramatic construction and distinctive features are discussed. 6 s.h.

Professor Peppler
203-204. Homer.-Odyssey. Pindar and Bacchylides. 6 s.h. Professor Peppler $^{\text {2 }}$
205-206. Greek Historians.-Herodotus, Books VII and VIII; Thucydides, Books VI and VII. 6 s.h.

Professor Pepplek
207-208. Greek Orators.-Selected speeches. 6 s.h.
Professor Peppler
243. Greek Archaeology.-The topography and monuments of Athens are studied, and other matters supplementary to course 141-142 are presented. Course 243 is intended primarily for students who wish to prepare themselves for study in Greece or for work toward an advanced degree. Courses 105-106 (or the equivalent) and 141-142 are prerequisites. 3 s.h.

Assistant Professor Johnson
244. Greek Epigraphy.-The history of the alphabet is studied, and important inscriptions are read for their content. Prerequisite, Greek 107108 or the equivalent. 3 s.h.

Assistant Professor Johnson

## DEPARTMENT OF HISTORY

professors boyd, Laprade, and rippy, associate professors shryock, CARROLL, AND bALDWIN, ASSISTANT PROFESSOR NELSON, $\dagger$ dr. LANNING, meSSRS. MCCLOY,* MANCHESTER, AND wOODY
The courses in history are designed (1) to give a comprehensive survey of modern European and American history; (2) to provide for a more detailed study of certain phases of English, American, and His-panic-American development; (3) to give some knowledge of the problems and resources of the general reader and the teacher of history.

Course $1-2$ is a prerequisite for all other courses, and one course in addition is required of all who wish to elect course 204; courses 9 and 91 are prerequisite for courses $113,114,119,120$. Sophomores who took only one semester of course 1-2 in the freshman year may be admitted to courses 9 and 91 or 16 provided they made a grade of 85 or above on the semester taken. Courses offered for Seniors and Graduates are limited to twenty-five students; Juniors may not elect them without special permission from the department and the Council on Graduate Instruction.

Courses are offered throughout the year unless otherwise specified.

[^69]
## FOR FRESHMEN AND SOPHOMORES

1-2. Modern and Contemporaneous Europe.-In this course the development of modern Europe since the middle of the century is traced with special reference to the rise of nationality, the industrial revolution, scientific thought, domestic politics in the leading states, colonial expansion, diplomacy, and the World War. 6 s.h.

> Associate Professors Shryock, Carroll, and Baldwin,
> Assistant Professor Nelson, Dr. Lanning, Messrs. McCloy, Manchester, and Woody

## PRIMARILY FOR SOPHOMORES AND JUNIORS

9. Political and Social History of the United States to 1800.-A general survey of the development of the United States in which effort is made to place the proper emphasis on underlying economic or other causes of political and social progress. Required readings in the Yale Chronicles of America with the presentation of book reviews and one research paper. First semester. 3 s.h. Professor Rippy and Dr. Lanning
10. Political and Social History of the United States, 1800 to 1860 .-This course completes the work begun in 9 . Second semester. 3 s.h.

Professor Rippy and Dr. Lanning
16. The Development of Modern Europe.-This course is designed as a guide to the study of the forces that have produced Europe as it is today. starting with the Renaissance and the Reformation. 6 s.h.

Associate Professor Carroll.
This course is not open to students who take course 101-102.

FOR JUNIORS AND SENIORS
101-102. Western European Civilization.-This course is a study of the development in Western Europe of the familiar institutions and culture of modern society. 6 s.h. Assistant Professor Nelson

Sophomores who made an average grade of 85 or more on course 1-2 may also be admitted to this course. It is not open to those who have had or are taking course 16.
113. History of the United States since 1860.-A continuation of courses 9 and 91. The Civil War and its results, the evolution of reconstruction policies, cultural, political, and economic development since 1876, the World War, and post-bellum problems. First semester. 3 s.h.

Dr. Lanning
Prerequisites, courses 9 and 91.
114. History of the United States Foreign Policy.-This course traces the history of American Diplomacy since 1789. Second semester. 3 s.h.

Professor Rippy
Prerequisites, courses 9 and 91.

Greek 131-Latin 132-Classical History.-See Department of Latin and Roman Studies.
119. Social and Economic History of the American People.-Particular attention is given to the relationship between economic forces and such phases of social life as the family, morals and customs, immigration, crime and punishment, amusements, public opinion, and public health. 6 s.h.

Associate Professor Shryock
Prerequisites, courses 9 and 91.
120. The Church in American History.-Among the subjects considered are the relation of theology and church government to political theory and practice, the social and political results of the Great Awakening and of ecclesiastical controversies, the part played by the Church in the American Revolution and in the making of state constitutions, in education, westward expansion, in the reform movements of the nineteenth century, labor controversies, the Civil and World Wars, and internationalism. 6 s.h. Associate Professor Baldwin

Prerequisites, courses 9 and 91.
124. English History.-A survey of transitions in the political institutions and social development from the Norman Conquest to the present. 6 s.h.

Professor Laprade

## FOR SENIORS AND GRADUATES

203. The Union, Confederacy, and Reconstruction.-The subjects considered are the rise of secession, the constitutional and economic problems of the Union and Confederacy, and the political and economic adjustments during reconstruction. First semester. 3 s.h.

Professor Boyd
[Not offered in 1930-31]
204. English Constitutional History.-After a brief review of the AngloSaxon period, a detailed study is made of those medieval institutions which form the basis of the British constitution. This is followed in the second semester by a general survey of the changes wrought in English political history during the seventeenth and eighteenth centuries, the main lines of constitutional development since 1800, and an outline of the British government as it exists today. 6 s.h.

Professor Laprade
[Not offered in 1930-31]
210. Constitutional History of the United States, 1763 to 1860.-Among the subjects considered are the issues and nature of the Revolution, the problems of the confederation, the nature of the constitution in the light of its early interpretations, the rise of political parties, sectionalism and its attendant political and economic interests, and the slavery controversy. 6 s.h.

Professor Boyd
[Not offered in 1930-31]
212. The Teaching of History and Civics (Education 226).-This course consists of informal discussions, based upon collateral reading and observation work of such topics as aims, tests for values, the social-studies curriculum, class-room procedure, course and lesson planning, etc. The class is limited in numbers to fifteen, admission being made only after consultation with the instructor, preferably during the preceding spring. Only such Seniors are admitted as are thinking seriously of teaching history in the high schools, who have taken at least eighteen hours of history in college, and who expect to qualify for a North Carolina Grade A teaching certificate. These qualifications, however, do not necessarily apply to graduate students, who may be admitted upon consultation with the instructor at the beginning of the fall term. $\mathbf{6}$ s.h.

## Associate Professor Shryock

217. Europe since 1870.-International relations since the Franco-German War is the chief subject of study in this course; special emphasis is placed upon the underlying economic and political influences. 6 s.h.
218. The History of the European Proletariate.-This course is concerned chiefly with the origins, expansion, and organization of the industrial working classes of Europe. The following problems are emphasized: the decline of serfdom, the growth of an urban working class and social revolutions in England, France, and Germany prior to the eighteenth century, the results of the Industrial Revolution, and labor movements and theories during the nineteenth and twentieth centuries. 6 s.h.

Associate Professor Carroll
[Not offered in 1930-31]
222. Early Modern History.-A survey of the social and political changes in Western Europe during the fourteenth and fifteenth centuries, the Protestant Revolt and the Catholic Reaction of the sixteenth century, and the rise of toleration. 6 s.h.

Assistant Professor Nelson
[Not offered in 1930-31]
223. Medieval Institutions and Culture.-A consideration of the classical heritage, the Germanic infusion, development of ecclesiastical, feudal, monarchical and communal institutions, relations of Church and State, the rise of universities, vernacular literatures, philosophy and art, in the period 300-1300 A.D. 6 s.h. Assistant Professor Nelson
230. The History of North Carolina.-The evolution of the commonwealth from its origins to the present is traced with particular emphasis on social conditions and the recent period. Second semester. 3 s.h.

Professor Boyd
[Not offered in 1930-31]
231. The Hispanic-American Republics.-A survey of the political, economic, and social development of the Hispanic-American nations since the beginning of the movement for independence in 1810. Considerable attention is also given to the foreign commerce and foreign relations of these nations. First semester. 3 s.h. Professor Rippy
232. The Hispanic Colonies of the New World.-The development of the Iberian states as colonizing powers, the work of the conquerors, the Spanish colonial policy and system, their influences and results, native races, the international contest for supremacy, and the decay of Spanish power in America and the Philippines. Second semester. 3 s.h.

Dr. Lanning

## DEPARTMENT OF LATIN AND ROMAN STUDIES

## PROFESSORS ROSBOROUGH AND ANDERSON, ASSISTANT PROFESSOR GATES, AND MR. SLEDD

Students who present for entrance less than the four standard units of high school Latin may make up the deficiency by taking the requisite courses from Latin 1-2 and Latin 3-4. These courses are by no means designed to supplant the teaching of Latin in high school.

Major: a minimum of thirty semester-hours which must include Latin 11, 12, 13, 14, 15-16, 17-18, the balance to be chosen from courses numbered above 100 and including Greek 131, Latin 132. In a teaching major Latin 109 must be included. All Latin majors are strongly recommended to get at least an elementary knowledge of Greek.

Odd-numbered courses are offered in the first semester and even-numbered courses in the second semester.

FOR ALL STUDENTS, PRIMARILY FOR FRESHMEN AND SOPHOMORES
1-2. Elementary Latin.-Forms, constructions, vocabulary, English derivatives. Open to all students. Those who present only one unit of Latin for entrance must attend the course from the beginning, but will receive credit only for the second semester's work. Those who satisfy the entrance requirement in foreign language by presenting four units of languages other than Latin may count the course for college credit on completing Latin 3-4. 6 s.h.

3-4. Intermediate Latin.-First semester: four orations of Cicero. Second semester: at least four book of Vergil's Aeneid. Prerequisite: two units of entrance Latin or Latin 1-2. Students presenting three units of Latin for entrance are strongly advised to attend the first semester, Latin 3, for review, but will receive only five semester-hours credit on completing Latin 4. 10 s.h.
11. Roman Comedy.-At least three plays of Terence. Prerequisite: four units of entrance Latin or Latin 3-4. 3 s.h.

Professor Anderson and Assistant Professor Gates
12. Roman Lyric Poetry.-The Odes and Epodes of Horace. 3 s.b.

Professor Anderson and Assistant Professor Gates
13. Catullus.-Prerequisite: Latin 11 and 123 s.h.

Professor Rosborough
14. Sallust and Tacitus.-The Agricola and Germania of Tacitus with comparative study of the historical monograph as seen in the Jugurtha and Catiline of Sallust. 3 s.h. Professor Rosborough

15-16. Latin Composition.-Prerequisite or concurrent: Latin 11 and 12. One hour throughout the year. 2 s.h. Professor Rosborough

17-18. Sight Reading in Mediaeval Latin.-One period of one and onehalf hours per week throughout the year. Prerequisite: Latin 11 and 12. Recommended to students of Medieval Institutions and Culture (History 223). No outside preparation required. 2 s.h. Professor Rosborough

FOR JUNIORS AND SENIORS
101. Tacitus and Suetonius.-
[Not offered in 1930-31]
102. Roman Satire.-Horace and Juvenal.
[Not offered in 1930-31]
103. Roman Elegiac Poetry.-Selections from Tibullus, Propertius, and Ovid.
[May not be offered in 1930-31]
104. Roman Philosophy.-Lucretius: De Rerum Natura, selections from Books I, II, III, and V. 3 s.h.
[May not be offered 1930-31]
105. The Roman Epigram.-Martial: the development of the epigram before him; his significance in the history of the epigram and for the age of Domitian; his influence traced down into the modern world. 3 s.h.

Professor Rosborough
106. Letters of Pliny the Younger.-Study of the society and institutions of his time. 3 s.h.

Professor Rosborough
109. Materials and Methods.-A study of Latin in the secondary school curriculum. Course for prospective teachers of high school Latin; required of Latin teaching majors. Prerequisite: eighteen approved se-mester-hours of college Latin including Latin 11, 12, 13, 14. 3 s.h.

Professor Rosborough or Professor Anderson

## COURSES OF GENERAL INTEREST

111-112. Latin Literature in English Translation.-
[Not offered in 1930-31]
113-114. Roman Civilization.-
[Not offered in 1930-31]

Greek 131-Latin 132-Classical History.-First semester: History of Greece with a brief introduction on Oriental nations. Second semester: History of Rome. May be counted for credit either as Greek or as Latin or as History. 6 s.h.

Professor Anderson
117-118. Introduction to Roman Archaeology and Art.-
[Not offered in 1930-31]

## FOR SENIORS AND GRADUATES

201. Roman Fiction.-Petronius and Apuleius; the Milesian tale and its influence.
[Not offered in 1930-31]
202. Early Latin Christianity.-Readings in Tacitus, Pliny, Minucius Felix, and the church fathers.
[Not offered in 1930-31]
One of the two following year-courses 203-204 or 205-206 will be offered in 1930-31:

203-204. Epic Poetry.-Vergil and a study of the Greco-Roman epic as culminating in him. Throughout the year. 6 s.h.

Assistant Professor Gates
205-206. Roman Dramatic Literature.-Select Comedies of Plautus and Terence; select Tragedies of Seneca. Rapid reading course. Throughout the year. 6 s.h. Assistant Professor Gates

209-210. Vulgar Latin and Introduction to Romance Philology.-Prerequisite: Latin 11 and 12 and not less than two years of college French or college Spanish. Throughout the year. 6 s.h.

Professor Rosborough
For courses for Graduates see the announcement of the Graduate School.

## DEPARTMENT OF MATHEMATICS

PROFESSORS FLOWERS, MĀRKHAM, RANKIN, AND ELLIOTT, ASSISTANT PROFESSORS PATTERSON, ROBISON, ALDRIDGE, HICKSON, AND MILES, MESSRS. ARNOLD AND DRESSEL, AND ASSISTANTS

Unless otherwise specified, odd-numbered courses are offered the first semester and even-numbered courses the second semester.

1. College Algebra.-Each semester. 3 s.h.

Staff
This course is required of all students. Students found deficient in elementary algebra may be required to review this before registering for course 1.
2. Plane Trigonometry.-Each semester. 3 s.h.

Stafr
Prerequisite, except by special permission of the department, course 1. Course 2 is required of all students.
5. Plane Analytic Geometry.-Each semester. 3 s.h.

Staff Prerequisite, course 2.
10. Engineering Mathematics.-This course, given for engineering freshmen, includes courses 1,2 , and 5. 10 s.h. Staff
16. Solid Geometry.-Given second semester on sufficient demand. 3 s.h. Staff
This course carries elective credit only.
21. Mathematics of Investment.-An elementary course dealing with simple and compound interest, annuities certain, amortization, sinking funds, depreciation, evaluation of bonds, and life insurance. 3 s.h. Assistant Professor Hickson
Prerequisites, courses 1 and 2.
25. Differential Calculus.-Each semester. 4 s.h.

Staff Prerequisite, course 5.
30. Integral Calculus.-Each semester. 4 s.h.

Staff Prerequisites, courses 5 and 25.
201. History of Mathematics.-This course deals with the evolution of the following topics: number system, arithmetic, geometry, algebra, trigonometry, analytical geometry, calculus, modern geometry. Brief sketches of the lives of the builders of mathematics will be given. 3 s.h.

Professor Rankin
Prerequisite, course 30.
204. Teaching of Mathematics.*-This course is designed primarily for those who intend to teach high school and college mathematics. It deals with the recent changes in methods of studying mathematics. 3 s.h.

Professor Rankin
Prerequisite, course 30.
225. Theory of Equations and Determinants.-3 s.h.

Assistant Professor Patterson
Prerequisite, course 25.
231. Differential Equations.-A study of the more common types of ordinary differential equations. Primarily a problem course for engineers. 3 s.h.

Professor Elliott
Prerequisite, course 30.
235. Modern Higher Algebra.-A study of linear dependence, solution of a set of linear equations. Study of matrices, linear transformations, invariants of linear transformations, bilinear forms. Either semester. 3 s.h. Assistant Professor Robison
Prerequisite, course 25.

[^70]239-240. Advanced Calculus.-This course is a study of the processes of the calculus, their meanings and applications. It is designed to furnish a necessary preparation for advanced work in analysis and applied mathematics. 6 s.h.

Professor Elliott
Prerequisite, course 30.
250. Modern Geometry.-Modern geometry of the triangle, transversals, harmonic sections, harmonic properties of the circle, inversions, poles, polars, etc. Valuable to teachers of high school geometry. 3 s.h.

Professor Rankin
Prerequisite, course 25.
255-256. Projective Geometry.-The elements of projective geometry treated synthetically. Introduction to homogeneous coördinates with application to projective geometry. Study of different types of collineations. 6 s.h.

Assistant Professor Robison
Prerequisite, course 25.
259-260. Analytic Geometry of Space.-The usual topics treated in cartesian and homogeneous coördinates. An introduction to differential geometry is included. 6 s.h.

Professor Elliott
Prerequisite, course 25.
275. Probability.-Introductory course. Combinatory analysis, mean values, Bernoulli's theorem, the probability integral, statistics. 3 s.h.

Assistant Professor Miles
Prerequisite, course 30.
276. Probability.-Continuation of course 275. Geometrical probability, probability of causes, theory of errors, applications. 3 s.h.

Assistant Professor Miles
280. Fourier's Series and Spherical Harmonics.-The properties of Fourier's Series and spherical harmonics with application to problems of mathematical physics. Either semester. 3 s.h.

Assistant Professor Robison
Prerequisite, course 30.
284. Vector Analysis.-This course is a study of the different vector products and the calculus of vectors, with applications to geometry and mechanics. 3 s.h.

Professor Elliott
Prerequisite, course 30.

## DEPARTMENT OF PHILOSOPHY

PROFESSORS CRANFORD AND ———, AND ASSISTANT PROFESSOR RHINE
Odd-numbered courses are offered in the first semester, even-пиmbered courses in the second semester.
101. Introduction to Philosophy.-This course is intended to acquaint the students with the nature of philosophical problems and to show how they arise in the mind of the individual. Psychology 101, or its equivalent is a prerequisite for this course, except by special permission. Lectures. assigned readings with reports. 3 s.h.

Professor Cranford
102. History of Philosophy.-This course gives a general survey of the field of philosophy and considers the leading historical solutions of philosophical problems. Prerequisite, Psychology 101, or its equivalent. Text, lectures, assigned readings with reports. 3 s.h. Professor Cranford
106. Logic.-A study of the fundamental principles underlying all reasoning, both deductive and inductive, and their application in scientific methods of thinking. Textbook, lectures, and assigned readings. 3 s.h. Professor Cranford
107. An Outline History of Science.-A review of the origin and development of the modern sciences. A general history of scientific method, of the achievement by mankind of analytical and experimental ways of thinking. Two lectures and one discussion hour. 3 s.h.

Assistant Professor Rhine
203. The Philosophy of Conduct.-This course attempts a critical inquiry into the fundamental concepts and principles of human conduct. These are approached from the standpoint of nature, psychology, and philosophy. It analyzes the content of moral consciousness and seeks to find the laws that rule in the realm of virtue and finally to discover the ultimate nature of the right. Lectures and textbook. Text used: Everett's The World of Values. 3 s.h.

Professor Cranford
204. Christian Ethics.-This course attempts a critical inquiry into the fundamental concepts and peinciples of conduct in the light of Christianity. It seeks to show the practical application of these concepts and principles in a doctrine of Christian virtue and duties. Lectures and textbook. Text used: Smythe's Christian Ethics. 3 s.h.

Professor Cranford
205-206. Idealism.-A survey of idealistic systems of philosophy, with chief emphasis on the more recent developments in idealistic thinking. Lectures and assigned readings with reports. Prerequisite, Philosophy 101 or 102. 6 s.h.

Professor Cranford
208. A Constructive Survey of Modern Science.-An orientation course, designed to present a synthetic view of nature from the data of the modern sciences. It is aimed to be corrective of the tendencies toward over-specialization. Two lectures and one discussion hour. 6 s.h.

Assistant Professor Rhine
109. History of Ancient Philosophy.-A survey of reflection on the nature of man and his place in the world from Thales to Aquinas with emphasis on Plato. Lectures and reports. 3 s.h.

Professor
110. History of Modern Philosophy.-Continuation of the preceding, but may be elected separately. The development of philosophy from Bruno to Herbert Spencer, with Kant as the central figure. Lectures and reports. 3 s.h.

Professor
111. Contemporary Philosophy.-A general inspection of the main currents of present philosophical thought including the realism of Russell and Whitehead, the pragmatism of James and Dewey, and the neo-idealism of Croce and Gentile. Attention will be given to the relation of these schools to the idealism of Bradley and Bosanquet. Reading and discussion. 3 s.h.

Professor
112. Recent Aesthetic.-Study of the chief contemporary views of the nature of art, the intuitionism of Croce, formalism of the art critics, and expressionism of Bosanquet. Reading, analysis of examples, discussion. 3 s.h.

Professor
213-214. Philosophy of the Seventeenth Century.-The center of this course will be a detailed study of Spinoza's Ethics, but attention will be given to his contemporaries, Descartes and Leibniz, and to the contrast between the rationalism of these thinkers and the empiricism of the British philosophers, Locke, Berkeley, and Hume. Lectures and reports. 6 s.b.

Professor
215-216. History of Aesthetic.-The tracing of the historical solutions of traditional problems, such as the nature of imitation, symbolism, the ugly, the sublime, and the comic, the relation of art to nature, to morals, and to economics, the relation of the particular arts to each other, the standard of taste. General theories will be illustrated and tested by examples from the arts. Reading and discussion. 6 s.h.

Professor

## DEPARTMENT OF PHYSICS

PROFESSORS EDWARDS AND HATLEY, ASSISTANT PROFESSORS COLLINS AND NIELSEN, MR. CARPENTER, AND ASSISTANTS
The first course in physics deals largely with those fundamental facts and theories concerning the physical universe that are supposed to be of interest to every intelligent man, and the matter presented is within the comprehension of every college student.

The courses in physics after the first year are designed to meet the needs of three classes of students: (1) those desiring to specialize in physics with a view to work in teaching or investigation; (2) those intending to pursue the study of medicine, biology, or chemistry; (3) those looking forward to the study of engineering. The work of the first year is designed to lay a broad foundation for subsequent study.

Odd-numbered courses are offered in the first semester, even-numbered courses in the second semester.

1-2. General Physics.-This course stresses neither mathematical processes nor exact measurements. It traces historically and experimentally the development of great principles. The class is divided into four groups according to the ability of the students as judged by various tests. For the purpose of laboratory instruction, the entire class is divided into fifteen sections. Three hours recitation and two hours laboratory. 8 s.h.

51-52. Advanced General Physics.-A course in general physics designed to prepare students for entrance to medical colleges. Three hours lecture and three hours laboratory. 8 s.h.

Assistant Professors Neilsen and Collins
Prerequisite, course 1-2 or its equivalent.
55-56. Teacher's Physics.-This course is designed primarily for those intending to teach physics in secondary schools. Enough advanced theory is covered to give some perspective, but special emphasis is placed on a study of method, every-day application of principles, construction of apparatus, the mounting of classroom experiments, and on general laboratory technique. 6 s.h.

Assistant Professor
Prerequisite, course 1-2 or its equivalent.
5. Household Physics.-A course designed primarily to meet the requirements in physics of students preparing to specialize in domestic science. The course is based on Whitman's Physics of the Household. 3 s.h.

Assistant Professor
If less than ten students elect any one of the three preceding courses, it will not be offered.

53-54. Physics for Engineers.-A course in general physics which gives special emphasis to engineering problems. Open to Sophomores who lave completed trigonometry. Four hours recitation and three hours laboratory. 10 s.h.

Professor Hatley and Assistant Professor Collins
The following courses are arranged as undergraduate majors in physics. They require Physics 1-2, or its equivalent, as a prerequisite.
151. Laboratory Physics.-In this course students are taught methods of exact observation and measurement in mechanics, sound, and light. 1 to 3 s.h.

Assistant Professor Collins
152. Laboratory Physics.-A continuation of course 151 into the fields of electricity and magnetism. 1 to $\mathbf{3}$ s.h. Assistant Professor Nielsen
153. Mechanics.-This course covers in a thorough way the more advanced phases of mechanics, which do not require the use of the calculus. 3 s.h.

Assistant Professor Collins
154. Molecular Physics.-A continuation of course 153 into the field of molecular physics. 3 s.h.

Assistant Professor Collins

The following courses are arranged primarily for senior students, but they are open to graduate students. An elementary knowledge of the calculus and credit for 12 semester hours in Physics is presumed in all of the following courses.

201-202. Principles of Radio Transmission and Reception.-A course covering the general theory of wave propagation and including a study of inductance, capacity, induction coils, oscillatory discharge, high frequency generators and transformers, and the various methods of detecting electromagnetic waves. 6 s.h. Assistant Professor Collins

203-204. Analytical Mechanics.-Geometry of motion; kinematics of a particle and of a rigid body; statics, kinetics, of a particle and of a rigid body; relative motion; Lagrange's equations; general principles of mechanics. 6 s.h. Assistant Professor Collins
205. Physical Optics.-This course is a treatment of the subject of light adapted to the needs of students completing general physics and is of special interest to chemical and pre-medical students. The course is based on Taylor's Advanced Optics. 3 s.h.

Professor Hatley
206. Modern Physics.-A lecture course consisting of a rapid review of the entire field of physics with special emphasis on the outstanding experiments underlying modern physics. 3 s.h. Professor Hatley

207-208. Electricity and Magnetism.-This course covers the fundamental phenomena of direct and alternating currents and magnetism. Starling's Electricity and Magnetism is used as the basis of the lectures. Smith's Electrical Measurements is used as a guide in the laboratory exercises. Two lectures and one laboratory period a week, throughout the year. 6 s.h.

Professor Edwards
[Under special conditions a credit of either 2 or 4 semester-hours may be arranged]
209. Thermodynamics.-Thermodynamics is the science on which is based all of the physico-chemical sciences. This introductory course deals with basic principles freed from all unnecessary complications. Hence it covers neither the theory applied to heat engines nor, in detail, the theory of chemical equilibrium. It is in a sense preparatory to such studies. 3 s.h.

Professor Edwards
[Offered in alternate years with course 207-208]

## DEPARTMENT OF PSYCHOLOGY

PROFESSOR MCDOUGALL AND ASSISTANT PROFESSORS ZENER AND RHINE
101. Introduction to Psychology: General Principles.-Lectures, demonstrations, prescribed reading and reports. 3 s.h.

Professors McDougall and Drs. Rhine and Zener
102. Introduction to Psychology: Experimental and Applied.-A demonstrational introduction to the methods and results of experimental and applied psychology. 3 s.h.

Dr. Zener

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\text { 110. Logic.-See Philosophy 106. } 3 \text { s.h. Dr. Rhine }
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111. An Outline History of Science.-See Philosophy 107. 3 s.h. $\quad$ Dr. Rhine
112. Social Psychology.-Lectures, readings, and reports. 3 s.h.

Dr. McDougall
202. Abnormal Psychology.-Lectures, readings, and reports. 3 s.h.

Dr. McDougall
203. Advanced Experimental Psychology.-A laboratory course designed to give first-hand acquaintance with experimental technique and methodology. Six laboratory hours. 3 s.h. Dr. Zener
209. Experimental Psychology: Problems and Theories.-An historical survey of experimental psychology, with a critical study of selected problems and theories. 3 s.h.

Dr. Zener
204. Physiological Psychology: Nerve Conduction and Reflex Action.-A consideration of the functional properties of the nervous system. Two hours lecture, five hours laboratory. 4 s.h.

Dr. Zener
206. Physiological Psychology: Development of Structure.-A study of the structure and function of the central nervous system from the embryological and comparative viewpoints. One hour lecture, six hours laboratory. 4 s.h.

Dr. Zener
[Not offered in 1930-31]
219. Introduction to the Psychology of Religion.-See Religion 275. 3 s.h. Dr. Hickman
220. Advanced Psychology of Religion.-See Religion 276. 3 s.h.

Dr. Hickman
224. A Constructive Survey of Modern Science.-See Philosophy 208. 3 s.h.

Dr. Rhine

## DEPARTMENT OF RELIGION

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PROFESSORS RUSSELL, SPENCE, CANNON, ORMOND, BRANSCOMB, MYERS,
    GARBER, GODBEY, HICKMAN, ROWE, AND MRS. SPENCE
            AND MR. LITTLE
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The Department of Religion is divided into several sub-divisions. The purpose is to offer courses through which the college student, especially one looking forward to some form of Christian work, may secure a general view of the field of religion, both in theoretical and practical phases. The prerequisite to all courses in religion is a year's course in the English Bible; all other courses are elective.

Odd-numbered courses are offered in the first semester, even-numbered courses in the second semester.

1-2. Biblical Literature.-This course includes a general survey of the entire Bible. It is required of all students by the end of the sophomore year, except those in Group IV, and of them before graduation. Enrollment in each section is limited to thirty-five. 6 s.h

> Professors Myers, Spence, Ormond, Rowe, and Mrs. Spence
[Note: On consent of the instructors, Sophomores may be admitted to courses 103, 104, 131, 141, 142, 161, 162.]
103. The Prophets of the Old Testament.-A general study of the history and nature of Hebrew prophecy; a detailed study of the message of the outstanding pre-exilic literary prophets. 3 s.h. Professor Myers
104. The History and Religion of the Jews to the Roman Period.-Based upon exilic and post-exilic prophecy, wisdom literature, and the earlier apocalypses. 3 s.h.

Professor Myers
131-132. American Christianity.-The aim of this course is to trace the growth of the different branches of the Christian Church in the United States, Canada, and Hispanic-America. Prerequisite, History 1-2 or its equivalent. 6 s.h.

Professor Garber
[Not offered in 1930-31]
141. Introductory Sociology.-This course is of general interest and is designed to introduce the student to the principles and practices of human association. 3 s.h.

Professor Ormond
142. Rural Sociology.-A study of rural conditions in relation to social welfare, existing rural ideals, observation of rural tendencies and movements, and rural betterment through social adjustments. Prerequisite, course 141. 3 s.h.

Professor Ormond
161. Introduction to Religious Education.-Designed to give the student some acquaintance with the tools and methods of modern religious education, the meaning and significance of scientific procedure, and the psychology of learning as it relates to this field. 3 s.h.

Professor Spence
162. Age-Group Characteristics.-A study of the different periods of human life with a view to determining the needs and interests of the pupil at each given stage. 3 s.h.

Professor Spence
201-202. Introductory Hebrew.-A study in the Hebrew language. The reading of the first eight chapters of Genesis inductively. 6 s.h.

Professor Godbey
203-204. Introduction to the Old Testament.-The origin, literary form, and contents of the books of the Old Testament in their historical setting. 6 s.h.

Professor Russell

211-212. Hellenistic Greek.-A course for students who wish to begin the study of the language of the New Testament. Selections from the New Testament will be read in the second semester. 6 s.h.

Professor Branscomb
215. The Life of Jesus.-An attempt to discover the consciousness, purpose, and significance of Jesus as set forth in the Synoptic record. 3 s.h.

Professor Myers
216. The Teaching of Jesus.-An interpretation of the teaching of Jesus, based upon the Synoptics, Matthew receiving principal consideration. 3 s.h.

Professor Myers
217. The New Testament in Greek.-Rapid reading in Greek text of the New Testament. Prerequisite, six semester-hours study of the Greek language. 3 s.h.

Professor Branscomb
218. The Exegesis of Selected Books of the New Testament.-The books studied will be Galatians, Colossians, and Hebrews. The course will be based on the Greek text. 3 s.h.

Professor Russell
213-214. The Beginnings of Christianity.-A survey course dealing with the background, the beginnings, and the early history of Christianity. Special attention is given to the creation of the literature of the New Testament. 6 s.h.

Professor Branscomb
219. Life of Paul.-A study of Paul's life on the basis of Acts and the epistles. Consideration is given to Paul as a man, the factors entering into his character, and his permanent contribution to the world. 3 s.h.

Professor Myers
[Not offered in 1930-31]
233. Church History to the Reformation.-A survey of the growth of the Christian Church from the Apostolic Age to the Reformation. 3 s.h.

Professor Garber
234. History of the Evangelical Movement.-Beginning with the Lutheran Reformation, this course traces the rise, growth, influence, and history to 1800 of the Calvinistic, Anglican, Reformed, Quaker, Baptist, and Methodist movements. 3 s.h.

Professor Garber
251. The Church and Rural Sociology.-A study of the religious, social, educational, and economic conditions of the country; the historical development of the church in the midst of rural social relations; an attempt to discover the present social obligation of the church. 3 s.h.

Professor Ormond
252. Rural Church Administration.-This course deals with the functions of the rural church ; the minister's attitude toward rural life, his mission to the rural people, as well as his service in managing the organization of and supervising the church program. 3 s.h. Professor Ormond
261. Administration and Supervision of Religious Education.-Deals with problems of administering and supervising the religious education program of the local church. Designed especially to train ministers and other administrative leaders in religious education. Methods of correlation and integration are considered. 3 s.h.

Mr. Little
262. Surveys, Tests, and Measurements.-Study of the methods of getting the facts in religious education. Consideration of underlying principles, techniques, and available materials. Special attention to procedure in a local church. 3 s.h.

Professor
265. Curriculum of Religious Education.-Study of various theories of the curriculum of religious education; conception of the curriculum as enriched and controlled experience. Analysis of existing curricula and critical evaluation of same. 3 s.h. Professor Spence
[Not offered in 1930-31]
266. Religious Drama.-Study and analysis of the best religious drama available. Project work in the writing and production of religious drama and pageants. 3 s.h.

Professor Spence
[Not offered in 1930-31]
267. Religious Education in the Community.-This course considers the larger relations of religious education to public education and other community agencies, and also the need, organization, program, and types of week-day religious education and the vacation church school. 3 s.h.

Professor Spence
268. Materials of Character Education.-A study of the Bible and other great religious literature for their contributions to character formation at each given stage of character development. Special emphasis on story material and modern religious poetry. 3 s.h.

Professor Spence
269. Principles and Program of Character Education.-Theory and methods of character education. Study of experiments made in this field. While primary consideration is given character building in religious education, the development of character education in the public schools will also be carefully surveyed. 3 s.h. Mr. Little
270. Religious Education in the Home.-Deals with special problems in connection with making the home an effective religious educational agency. Study of family relationships, worship habits, attitudes, and ideals. Coöperation of the home with other agencies in the moral and religious development of the child. 3 s.h.

Professor
271. Research in Religious Education.-For advanced students and especially those majoring in religious education. Offers direction in the use of various techniques and methods for both field and library investigations. (All professors in the department are available for special counsel.) 3 s.h.

Professor
272. Philosophy of Religious Education.-For advanced students interested in problems growing out of the philosophical implications of religious education. Critical examination of various theories and principles underlying modern procedure in religious education. Prerequisite, course 261. 3 s.h.

Professor
273. Curriculum Construction.-This course deals with the processes of research, construction, and experimentation used in curriculum making. Actual curriculum construction will be undertaken. 3 s.h.

Professor Spence
[Not offered in 1930-31]
275. Introduction to the Psychology of Religion.-Study of the major factors of religious experience, together with conditions bearing upon its genesis and growth. 3 s.h.

Professor Hickman
276. Advanced Psychology of Religion.-Psychological study of such problems as worship, prayer, and various types of belief. Some attention to special problems. Prerequisite, course 275 or its equivalent. 3 s.h. Professor Hickman
281. The Nature and Early Development of Religion.-Introduction to the early history of religion, the beliefs and practices of the more primitive peoples, and the religious life of the ancient world. 3 s.h.

Professor Cannon
282. Living Religions of the World.-A survey of the religious systems of India, China, and Japan, followed by a study of Judaism, Mohammedanism, and Christianity, the object being to trace the historical development of each religion. 3 s.h.

Professor Cannon
283. Expansion of Christianity.-Apostolic missions, conquest of the Roman Empire, winning of northern Europe, the modern missionary era, status of missionary work in important areas, social aspects of missions, missionary biography. 3 s.h.

Professor Cannon
284. Principles of Missions.-The great missionary agencies, their foundation and growth; creation and cultivation of the missionary spirit at the home base; training and work of the pastor; principles and practice of missionary education; organization of the local congregation for its missionary tasks. 3 s.h.

Professor Cannon

## DEPARTMENT OF ROMANCE LANGUAGES

PROFESSORS WEBB, COWPER, AND JORDAN, ASSISTANT PROFESSORS YOUNG AND
WALTON, MR. STEINHAUSER AND MR. BRIDGERS, MISS brewer, and miss seay
The elementary and introductory courses in French are for the general student and seek to impart a reading knowledge of standard French. Courses 107, 217-218 offer systematic training in the French language. They prepare for university courses where French is used in class, for
foreign study, and for teaching French. The literary courses are devoted to the systematic study of classical and modern French literature. Advanced students are offered an introductory course in Old French philology and literature.

The first two courses in Spanish are for the general student. They are designed to give a reading knowledge and a sound beginning in the use of the language. The remaining courses afford the opportunity to continue the study of the Spanish language and of Spanish and SpanishAmerican literature through four years.

An intensive course in Italian is offered to well-qualified language students.

Owing to the large number of applicants for enrollment in the French and Spanish courses, it is necessary to limit the number admitted. Students are admitted into each section or class in the order of application until the established maximum is reached.

Odd-numbered courses are offered in the first semester, even-numbered courses in the second semester.

## FRENCH

## FOR ALL STUDENTS

1. Elementary French.-Pronunciation, grammar to include regular verb forms and common irregular verbs, translation. 3 s.h.

Professors Webb and Jordan, Assistant Professors Young, Walton, and Mr. Bridgers
2. Elementary French.-Completion of the irregular verb, composition, dictation, and translation of simple French. 3 s.h.

Professors Webb and Jordan, Assistant Professors Young and Walton, and Mr. Bridgers
3. French Prose.-Grammar review, dictation, composition, reading and translation of selected works of modern French authors. 3 s.h.

Professors Webb and Cowper, Assistant Professors Young and Walton, Mr. Bridgers, and Miss Brewer
4. French Prose.-Dictation, composition, reading and translation of selected works of modern French authors. 3 s.h.

Professors Webb and Cowper, Assistant Professors Young and Walton, Mr. Bridgers, and Miss Brewer
5. Introductory Survey of French Literature from 1636.-Selected works of Corneille, Racine, Molière, Voltaire. Outline history, outside readings, and reports. 3 s.h. Professors Cowper and Jordan, Assistant Professors Young and Walton
6. Introductory Survey of French Literature from 1750.—Selected works of Rousseau, Chateaubriand, Hugo, Balzac. Outline history, outside reading, and reports. 3 s.h. Professors Cowper and Jordan, Assistant Professors Young and Walton

FOR JUNIORS AND SENIORS
107. French Composition.-Review of grammar. Oral and written composition. 3 s.h.

Professor Cowper
108. The French Romantic Movement.-3 s.h.
109. Moliére.-3 s.h.

Professor Cowper
Professor Webb
[Not offered in 1930-31]
110. Poems of Victor Hugo.-3 s.h.

Professor Webb
[Not offered in 1930-31]
111. French Drama Since 1850.-Realism in French drama, the social comedy, the problem play. 3 s.h. Assistant Professor Young
112. French Drama Since 1850.-The Théâtre Libre, the psychological drama, survival and renewal of Romanticism, the symbolistic drama, the contemporary stage. 3 s.h.

Assistant Professor Young
113-114. The Seventeenth and Eighteenth Centuries.-The rise and decline of French classicism from Malherbe to the Encyclopédistes and Beaumarchais. Lectures and reading. 6 s.h.

Assistant Professor Walton
25-26. Exercises in Spoken French.-Two hours a week throughout the year. 2 s.h.

Miss Seay
FOR SENIORS AND GRADUATES
215-216. The Modern French Novel.-A survey from Madame de Lafayette to Paul Bourget with particular reference to the effect of literary movements upon the evolution of novel technique. 6 s.h.

Professor Jordan
217-218. The French Language.-French phonetics, composition, dictation, conversation, lectures in French. 6 s.h.

Professor Webb
219. Old French.-An introduction to the Old French language and literature. Brief study of Old French grammar ; the Chanson de Roland; lectures. 3 s.h.

Professor Cowper
220. Old French.-Types of Old French literature. Reading of typical Romans d'aventure, lectures. 3 s.h. Professor Cowper
221. Rousseau and the Beginnings of Romanticism.-3 s.h.

Professor Cowper
[Not offered when Old French is given]
ITALIAN
FOR JUNIORS AND SENIORS
181-182. Italian.-Wilkins, First Italian Book; Italian Folk Tales; Dante, Vita Nuova; Dante, Divina Commedia. 6 s.h.

Professor Webb

## SPANISH <br> FOR ALL STUDENTS

61. Elementary Spanish.-Grammar of the principal parts of speech in their simple applications, regular verbs, and the most common irregular verbs. Reading of simple prose. 3 s.h.

Mr. Steinhauser and Mr. Bridgers
62. Elementary Spanish.-Continuation of course 61, including radical changing and the most common irregular verbs in all the tenses of the indicative and subjunctive. Reading of simple prose. 3 s.h.

Mr. Steinhauser and Mr. Bridgers
63. Spanish Prose.-Thorough review of grammar, emphasizing the uses of the subjunctive, common idiomatic phrases, and other peculiarities of syntax. Reading of representative texts of modern Spanish. 3 s.h.

Mr. Steinhauser
64. Spanish Prose.-Continuation of course 63. Reading of representative texts of modern Spanish. 3 s.h. Mr. Steinhauser
65. Spanish Literature.-General survey of Spanish literature from the earliest beginnings to the present day, with special emphasis on the fiction and drama of the Golden Age. 3 s.h. Mr. Steinhauser
[Not offered in 1930-31]
66. Spanish-American Literature.-Survey of Spanish-American literature, with special emphasis on the practical aspects of Spanish-American life. Advanced composition. 3 s.h.

Mr. Steinhauser
[Not offered in 1930-31]
67. Spanish Novel.-History of the origins and early types through the classic period. 3 s.h. Mr. Steinhauser
68. Modern Spanish Novel.-The Spanish novel from the beginning of the nineteenth century until the present. 3 s.h. Mr. Steinhauser

69-70. Spanish Conversation and Composition.-Exercises on assigned topics and material. Two hours a week throughout the year. 1 s.h. each semester.

Mr. Steinhauser
Open on consent of the instructor, to students who are taking or who have taken a course above Spanish 61 and 62.

## DEPARTMENT OF SOCIOLOGY

PROFESSOR ELLWOOD
No course in Sociology is open to freshmen or sophomores.
Odd-numbered courses are offered in the first semester, even-nambered courses in the second semester.

101-102. General Sociology.-An introduction to the scientific study of social life, its origin, evolution, and organization, as illustrated by a number of concrete social problems. 6 s.h.

Professor Ellwood
205. Social Pathology.--Prerequisite, courses 101-102 or their equivalent. A study of the causes, extent, significance, and constructive treatment of the principal forms of pathology in modern society: Poverty, physical defectiveness, malnutrition, feeble-mindedness, insanity, undirected leisure activities, and unstandardized commercial recreation, alcoholism, prostitution, vagrancy, and delinquency. 3 s.h.

Professor Ellwood
206. Criminology.-Prerequisite, courses $101-102$ or their equivalent. A study of the original tendencies of man and the problem of socializing these tendencies; the relation of physical and mental defectiveness and untoward influences in the home and neighborhood to crime; the development of criminological theory and procedure, emphasizing penal and reform methods, and especially modern methods of social treatment and prevention of crime. 3 s.h.

Professor Ellwood

# DEPARTMENT OF PHYSICAL EDUCATION 

## PHYSICAL EDUCATION FOR MEN

DIRECTOR OF PHYSICAL EDUCATION DEHART, ASSISTANT DIRECTORS OF PHYS-
ICAL EDUCATION BUCHHEIT, TILSON, CAMERON, COOMBS, AND BAKER, GYMNASIUM DIRECTOR CARD
Two hours a week of physical exercise and one hour of classroom work are required of all students through the sophomore year. Although not included in the 126 hours needed for graduation, the above requirements must be met satisfactorily before the end of the senior year. The work is under the immediate direction of the various coaches of the varsity teams. The aim to promote mass athletics is furthered by placing various supervised sports on a competitive basis.

A careful physical examination of all students is made and recorded and special training to correct physical deficiencies and weaknesses is given.

All students not excused from the regular course because of physical disabilities are required to take part in football, basketball, baseball, track, and swimming through their first year. The classroom work consists of lectures on the rules, methods of training, fundamentals of the sports, etc.

During the sophomore year a student may elect the sport in which he will major and his exercise will consist of work in that sport under the direct supervision of the Director of Physical Education or the Assistant Director who may be in charge of the sport elected as a major. The lectures will cover the methods of coaching the sport elected as a major and physical hygiene.

Calisthenics are used as little as possible and the entire course of work is planned to introduce games and the spirit of competition into the mass form of athletics.

The courses in physical education are designed to meet the increased demand for teachers of physical education and athletic coaching in the public schools.

A regulation costume of white shirt, white trousers, and gymnasium shoes is required.

## PHYSICAL EDUCATION FOR WOMEN

Miss Grout, Director
Miss Morze, Assistant
Two periods of exercise a week are required of all women students through the junior year. In addition, one lecture hour of personal hygiene is required of all freshmen. Although not included in the 126 hours needed for graduation, the above requirements must be met satisfactorily before the end of the senior year.

All students are given a physical and medical examination upon entering and at intervals throughout their college course. Classes in individual gymnastics and moderate sports are arranged for those who should not take the more active work.

## ACtivities offered:

Fall term (October to December): Hockey, swimming, tennis, riding, moderate sports, hiking.

Winter term (December to March): Informal gymnastics, Danish gymnastics, apparatus, games, individual gymnastics, folk dancing, clogging, interpretative dancing, swimming, basketball.

Spring term (March to June): Tennis, swimming, riding, baseball, track, and field events, archery.
102. The Teaching of Physical Education.-This course is intended to meet the needs of prospective teachers in the public schools who may wish to assist in physical education. It includes first, a review of personal and school health problems with emphasis on the teaching of hygiene in the public schools; second, discussions and lectures on such topics as the value of play, the psychological and physiological make-up of the school child, objectives, the planning of programs of physical education for different age groups; third, one meeting a week for practice in playing, refereeing, and coaching various games and sports. Three lecture hours and one practice period a week. 3 s.h. Miss Grout

Open to senior women in the Department of Education and to other Seniors and Juniors by permission of the instructor.



# THE GRADUATE SCHOOL OF ARTS AND SCIENCES 

## THE GRADUATE SCHOOL

## GENERAL STATEMENT

Prior to 1916 there was no separate organization within Trinity College to promote and supervise graduate studies. However, there had been for many years a limited number of graduate students who completed a year of post graduate work and received the degree of master of arts. The work of such students was supervised through the office of the Dean of Trinity College. Many of these graduate students went out from Trinity College to continue their studies at other colleges and universities and later achieved distinction as teachers and scholars.

In September, 1916, President Few appointed a Committee on Graduate Instruction to deal with the problems involved in the promotion and administration of graduate work. In that year there were six graduate students in the College, and seven graduates of the College were enrolled in the professional School of Law. During and immediately after the World War the number of graduate students remained small, but by the year 1923-1924 the graduate enrollment had increased to thirtyfive, exclusive of the college graduates enrolled in the School of Law.

The growing importance of graduate work in Trinity College caused the Committee on Graduate Instruction, during the first semester of the year 1923-1924, to make a careful study of requirements for admission to graduate work, of requirements for advanced degrees, and of other conditions affecting standards of graduate instruction. A comprehensive report was prepared by the Committee and adopted by the faculty. Provision was made for the granting of two advanced degrees, master of arts and master of education. Regulations were adopted which increased the distinction between graduate and undergraduate work. A thesis requirement was made for every candidate for a graduate degree, and provision was made for the examination of theses by faculty committees. The Committee on Graduate Instruction undertook a closer supervision of graduate courses and of the work of graduate students.

Thus, when Trinity College became Duke University in December, 1924, noteworthy progress had already been made in organizing a graduate department with advanced courses in many fields of study and with high standards. In accepting Mr. Duke's great benefaction, the Trustees definitely included a Graduate School of Arts and Sciences as a member of the University organization.

In the academic year 1926-1927 a Council on Graduate Instruction was established in the University to exercise a general supervision over graduate work in arts and sciences, and Professor William H. Glasson was appointed Dean of the Graduate School of Arts and Sciences.

## THE LIBRARY

Duke University has long possessed an excellent Library for the purposes of undergraduate instruction. In recent years special funds have been provided and appropriations made to collect material for the use of members of the faculty and graduate students desiring to engage in research work. Particular attention has been given to obtaining complete sets of important periodicals, biographical and bibliographical collections, files of Southern newspapers, collections of state papers, parliamentary debates, and historical documents, proceedings of scientific societies, and standard editions of American and foreign authors. This policy of constantly enriching the Library's store of source material will be continued.

Up to February 1, 1930, the Duke University Library had received and accessioned 147,160 bound volumes and 22,070 pamphlets. Many thousands of volumes and pamphlets have not yet been accessioned, and other purchases of books, periodicals, and brochures are in Europe awaiting shipment. The amount available for the purchase of books, newspapers, and periodicals for the year $1928-29$ was $\$ 75,916.48$. For the year 1929-30, the appropriations for books, periodicals and binding exceeded one hundred thousand dollars.

Beginning with the autumn of 1930 the Library building on the East Campus will be used by the Woman's College. A new University Library building, especially designed and equipped to facilitate research, will be opened on the West Campus. This building is an unusually fine example of Gothic
architecture. It is built of stone from the University's quarries near Hillsboro, N. C.

In the basement are the receiving room for books and periodicals which come to the Library, the offices of the order division, work rooms for the Library staff and a commodious stack room fitted with special stacks for newspapers.

On the first floor an important feature is a large reserve book room in which books in constant use by classes are kept for reference and for the time being withdrawn from general circulation. The seating capacity of this room is about 140 . On the same floor are a large periodical room, a manuscript room, a treasure room, and two offices.

The principal features of the second floor are the general delivery room with a spacious hall, the large public card catalogue, the main reading room with a seating capacity for more than 150, the cataloguing room and four offices for members of the Library staff.

On the third floor of the building a special reading room for graduate students is provided with a seating capacity of about 60. There are also on this floor eight seminar rooms, two studies and a large special reading room.

In the tower of the Library building are the fourth and fifth stories which provide six seminar rooms and two studies.

The main stack room of the Library building is seven stories high. The initial capacity of the main stacks is estimated as considerably in excess of 300,000 volumes. The stacks in the nearby Library of the Law School will provide for 60,000 volumes and the stacks in the special Library of the School of Religion will accommodate about 40,000 volumes. The libraries of the Law School and the School of Religion are connected by passageways to the University Library. In the School of Medicine is the Hospital Library with a collection which is at present about 20,000 volumes. There are also stacks provided for special scientific libraries in the Biology, Chemistry and Physics buildings.

Especial attention has been given in the construction of the Library to facilities for prompt delivery of books. The general delivery room is connected by pneumatic tubes with the reserve book room, the graduate reading room, the Law Library, the School of Religion Library and also with each floor level of
the main stacks. The general delivery room, the reserve book room, the graduate reading room and each floor of the main stacks will also have the service of book lifts or carriers.

The University Library is now receiving by subscription and donation 1,003 newspapers and periodicals. Thirty-five sets of periodicals have been added during the year 1929-30. Physics, Economics, History, Psychology, Latin, Law, and Religion have had large allowances. German, Austrian, and French newspapers covering the World War period constitute an outstanding acquisition. More than $\$ 5,800$ has been spent for newspapers.

The Hospital Library in connection with the School of Medicine has expended during the academic year about fifty thousand dollars for books, sets of periodicals and binding. The appropriations for the Library of the Law School have amounted to nearly $\$ 12,000$.

There have been many special purchases including 1,700 volumes of the library of Paul Hamilton Hayne, a Peruvian collection of 3,000 volumes in history and political science, and rare Confederate, Chivers, and Rossetti manuscripts.

The Library possesses a splendid collection of periodical sets in biology and chemistry. Large accessions have been made to the excellent equipment of periodicals in history, economics and political science. Recent purchases have gone far toward completing the important sets of the London Economist, the Statist and the Commercial and Financial Chronicle.

The Library has an unusually good collection of books and periodicals in international law. Several important foreign periodicals have recently been added in this field. Documentary reports of the decisions of various arbitral commissions, the publications of the Permanent Court of International Justice complete to date, and treaties on various phases of the subject of arbitration are available for the investigator.

One of the most valuable possessions of the Library is the Lanson collection in French literature, consisting of 9,000 volumes and 2,000 monographs and brochures. This collection includes authors and works from the fifteenth century to the present, together with the most useful critical volumes on authors and their works. The material on Voltaire and Rousseau is especially comprehensive and valuable. There are in
the collection many early editions and rare volumes of the sixteenth, seventeenth, and eighteenth centuries. This collection was Professor Lanson's private library and will give the Duke University Library very superior facilities for students of French literature.

Further large additions to the research material in the $\mathrm{Li}-$ brary are in prospect for later announcement.

## NEW SCIENCE LABORATORIES

New laboratory buildings have been erected on the West Campus in biology, physics and chemistry. Graduate students will find available the most modern equipment and facilities for research. In addition to the provision of modern apparatus, large sums have recently been expended to purchase important additions to the collections of scientific periodicals and publications in the departmental libraries, the University Library, and the Hospital Library.

In the School of Medicine elaborate facilities are provided for post graduate research in the various branches of medical science. Especial attention will be given to training in preventive medicine and public health work.

## GRADUATE DORMITORIES

One or more sections of the new dormitories on the West Campus will be reserved for graduate men. Board can be secured at the new Union building, which also has unusually attractive provisions for social intercourse and activities. Graduate women will find dormitory accommodations of the highest type on the East Campus. The Union building on the East Campus will furnish meals at reasonable rates and serve as a center of campus life.

## GRADUATE CLUB

One of the active organizations of the University is the Graduate Club. Its meetings are held monthly and are devoted to the professional and social interests of graduate students. Many eminent speakers have addressed the club at meetings open to the public. Recent speakers have been President W. P. Few, Professor William McDougall, Professor J. Fred Rippy,

Professor G. T. Hargitt, Professor Lewis Chase, and Professor C. M. Child. Mr. W. H. Simpson was president of the Graduate Club during the year 1929-30.

## FELLOWSHIPS AND SCHOLARSHIPS

For the assistance and encouragement of graduate students of high character and marked ability, the University has established a considerable number of fellowships and scholarships. The Angier B. Duke Memorial, Incorporated, awards an annual fellowship of one thousand dollars to a graduate student of exceptional merit. Three University fellowships of eight hundred dollars each, five University fellowships of seven hundred dollars each, and sixteen University fellowships of six hundred dollars each have been established. There are also eighteen graduate scholarships of three hundred dollars each. Holders of fellowships and scholarships will be expected to pay the tuition fee and such additional fees as are regularly required. Applications for these appointments should be made on or before March 15 of each year. In case vacancies occur, applications submitted on a later date will be considered.

There are also a number of graduate assistantships open in the various departments with compensation ranging from $\$ 300$ to $\$ 800$. Graduate assistants are under obligation to give part of their time to such work in the departments as may be assigned to them. They will usually be unable to carry a full program of study. Information regarding fellowships, graduate scholarships, and graduate assistantships, together with application blanks, may be obtained from the Dean of the Graduate School, Duke University, Durham, North Carolina.

## ENCOURAGEMENT OF RESEARCH

The President of the University appoints annually a Faculty Committee on Research consisting of three members, the President himself being a fourth member ex officio. On April 1 of each year the Chairman of the Committee on Research receives written applications from members of the Faculty for stipends for the encouragement of research. Amounts granted may be expended for the employment of research assistants, or for the purchase of books, apparatus, and materials. The amount of
the stipend may not exceed five hundred dollars. Each member of the Faculty to whom a research stipend is granted must within twelve months make a written report of the progress of his investigation.

## UNIVERSITY PRESS

The Duke University Press affords facilities for the publication of many scholarly books and articles. The press issues four quarterly reviews: The South Atlantic Quarterly, The Hispanic American Historical Review, American Literature, and Ecological Monographs.

A list of the publications of the Duke University Press may be obtained from the manager of the Press, Durham, North Carolina.

## REQUIREMENTS FOR ADMISSION AND DEGREES

Full information regarding requirements for admission and degrees may be obtained by addressing the Dean of the Graduate School of Arts and Sciences, Duke University, Durham, N. C., and asking for the special bulletin annually published by the Graduate School.

## COURSES OF INSTRUCTION

## DEPARTMENT OF BIOLOGY

(Certain undergraduate courses are open to graduate students with the approval of the department. See the "Bulletin of Undergraduate Instruction.")

## botany

For seniors and graduates
251. Plant Physiology.-First semester. Lectures: to be arranged. 4 s.h. Assistant Professor Avery
Prerequisite, Botany 1.
201. Cytology.-A study of the cell. Laboratory and lectures. Second semester. 4 s.h. Assistant Professor Avery
Prerequisites, Botany 1 or Zoölogy 1 and one other course of intermediate grade.
202. Inheritance and Variation.-A study of the principles of inheritance in plants and animals. Lectures, assigned readings, and some laboratory work. Second semester. 3 s.h.

Prerequisites, Botany 1 or Zoölogy 1.
225. Special Problems.-Hours and credits to be arranged.

Botanical Staff
FOR GRADUATES
311. Advanced Mycology.-Laboratory and lectures. 4 s.h.

Professor Wolf
312. Advanced Plant Pathology.-Laboratory and lectures. 4 s.h.

Professor Wolf
352. Advanced Plant Anatomy.-Structure and development of anatomy of economic plants. Second semester. 4 s.h.

Assistant Professor Avery
356. Taxonomy of Special Groups.-Second semester. 4 s.h.

Professor Blomquist
399. General Botanical Seminar.-One hour per week throughout the year. Required of all graduates majoring in botany. Seniors are invited to attend. Hour to be arranged. 2 s.h. Botanical Staff

## ZOOLOGY

FOR SENIORS AND GRADUATES
152. Comparative Physiology.-The primary functions of animals of all groups and a more detailed study of the physiological processes in mammals. Second semester. 4 s.h.

Professor Hall
Prerequisite, one year of Zoölogy.
181. Animal Micrology.-The technique of preparing normal sections of the various types of tissue. 4 s.h.

Professor Cunningham
191. General Embryology.-The fundamental principles of embryology, especially in the frog and the chick, with some work on the mammal. 4 s.h.

Professor Cunningham
221. Entomology.-The taxonomy, morphology, and physiology of insects, their theoretic and economic aspects. For students who have had at least one year of Zoölogy. Offered in even years. 4 s.h.

Assistant Professor Hopkins
231. Protozoölogy.-A study of the taxonomy, morphology, and physiology of unicellular organisms. For students who have had at least one year of Zoölogy. Offered in alternate years. 4 s.h.

## Assistant Professor Hopkins

261. Animal Parasites.-A consideration of animal parasites with particular emphasis upon those infesting man. Of particular interest to students preparing for medicine or public health work. 4 s.h.

Professor Pearse
Prerequisite, Zoölogy 1-2.

> COURSES PRIMARILY FOR GRADUATES, BUT OPEN TO SENIORS WITH ADEQUATE TRAINING
272. Ecology.-Natural history of animals-relations to environment. Assigned readings, lectures, reports, conferences. For students who have had at least one year of Zoölogy. Offered in odd years. 2 s.h.

Professor Pearse
201. Animal Behavior.-The development of mind in animals. Assigned readings, lectures, reports, conferences. Offered in even years. 2 s.h.
[Not offered in 1930-31] Professor Pearse
228. Endocrinology.-This course includes the structure, physiology, and embryology of the endocrine glands. The work consists of lectures and reading assignments and reports. 2 s.h.

Professor Cunningham
232. Advanced Protozoölogy.-Lectures and conferences, on the recent developments in the field of Protozoölogy. In the laboratory an individual problem will be undertaken by each student. The prerequisites for the course are (1) a definite and feasible problem, and (2) the proper training for carrying out this problem. 4 s.h.

Assistant Professor Hopkins
219-220. Research.-Students who have had proper training may carry on research under the direction of members of the faculty. Staff
262. Advanced Parasitology.-Lectures, conferences, and readings dealing with practical and theoretical matters relating to animal parasites.

Laboratory work on special problems may be taken in connection with this course by registering for Course 219-220. Offered in odd years. 2 s.h. Professor Pearse
223. Advanced Physiology.-A presentation of some of the problems with which physiologists have been concerned during recent years. Lectures, conferences, and laboratory work. First semester. 4 s.h.

Professor Hall
222. Advanced Ecology.-Readings, conferences, and reports; directed work in field or laboratory. Second semester. 2 or more s.h.

Professor Pearse
292. Experimental Embryology.-Lectures, assigned readings, and reports. In the laboratory a study is made of the effects of environment on various forms of animals, including the frog, chick, and mammal. Students electing laboratory work in connection with this course should register for Zoölogy 219-220. 2 s.h.

Prófessor Cunningham
[Not offered in 1930-31]

## FOR GRADUATES

351. Seminar.-A weekly meeting of graduate students and faculty to hear reports and to discuss biological facts, theories, and problems. One hour a week throughout the year. 2 s.h.

Staff

## DEPARTMENT OF CHEMISTRY

## FOR SENIORS AND GRADUATES

261-262. Physical and Electro Chemistry.-Fundamentals of general theoretical chemistry illustrated by selected laboratory experiments. Recitation: T.Th. at 8:30. Laboratory: F. 2-5. 6 s.h. Professor Gross

Prerequisites: Chemistry 3, 5, College Physics, and College Algebra. Calculus is desirable but is not required.

215-216. Advanced Inorganic Chemistry.-A study of modern valence theory and of inorganic compounds, particularly of the less common types, illustrated by suitable laboratory preparations. Recitations: M.W. at 9:30. Laboratory: F. 2-5. 6 s.h. Assistant Professor Vosburgh

Prerequisites: Chemistry 1,2,3, and 5. Chemistry 6 and advanced physics are desirable.
231. Quantitative Analysis.-A continuation of Chemistry 3, involving some of the more difficult analytical methods. One recitation and six laboratory hours for one semester; hours to be arranged. 3 s.h.

Assistant Professor Vosburgh
Prerequisite, Chemistry 3. Chemistry 6 is desirable.
232. Instrumental Analysis.-A study of the use of physical measuring instruments in chemical analysis. One recitation and six laboratory hours for one semester; hours to be arranged. 3 s.h.

Assistant Professor Vosburgh
Prerequisites, Chemistry 3, 6, and 31a. Laboratory Physics is desirable.
241. Physiological Chemistry.-A study of the chemistry of human physiology. Clinical aspects of the subject are treated with reference to the need of prospective medical students. First semester. Recitation: M.W. at 8:30. Laboratory: T.F. 2-5. 4 s.h. Professor Wilson

Prerequisites, Chemistry 3 and 5. Chemistry 6 is desirable, though not required.
244. Metabolism.-Open to students who have completed course 42 or its equivalent, and who have a reading knowledge of German. Lectures and collateral reading deal with the probable fate of foodstuffs in the body, the nitrogen balance, energy requirement, nutritive ratios, vital factors, and ductless glands. The laboratory work consists mainly of blood analysis under both normal and pathological conditions. The laboratory work of this course without the lectures may be taken by students who have passed Chemistry 42 . In this case only two semester hours credit will be given. Second semester. Recitation: M.W. at 8:30. Laboratory: T.F. 2-5. 4 s.h.

Professor Wilson
251-252. Intermediate Organic Chemistry.-Intended for students who have had elementary organic chemistry but whose preparation is insufficient for Chemistry 51 or research, and to meet the minor requirements of graduate students in other departments. Three recitations. 3 s.h. Assistant Professor Bigelow

253-254. Advanced Organic Chemistry.-A continuation of Chemistry 5, including discussion of the theories of organic chemistry. The laboratory work will include preparations of the more difficult type, requiring reference to the original literature. Lecture: T. at 11. Laboratory: nine hours, to be arranged. 8 s.h.

Assistant Professor Bigelow and Dr. Hauser
Prerequisites, Chemistry 5 or equivalent and a reading knowledge of German.
260. Colloid Chemistry.-An introductory study of the colloidal state of matter. Two recitations and three laboratory hours for one semester; hours to be arranged. 3 s.h.

Assistant Professor Vosburgh
Prerequisites: Chemistry 5 and 6. Calculus, Chemistry 61, and advanced physics are desirable.
271. Introduction to Research.-Lectures on the use of chemical literature, research methods, recording and publication of results, preparation of theses and other topics. One lecture. I s.h.

> Professors Gross and Wilson, Assistant Professors
> Vosburgh and Bigelow
270. Research.-The aim of this course is to give instruction in methods used in the investigation of original problems. Nine hours a week, laboratory, and conferences. 3 or 6 s.h.

Professors Gross and Wilson, Assistant Professors
Vosburgh and Bigelow, and Dr. Hauser

This course is offered in both semesters; students may elect the first semester without taking the second. The amount of credit will depend on whether the course is pursued for one or two semesters. It is open to Seniors who have had courses 3, $5^{\text {b }}$, and 6.

273-274. Seminar.-Open to seniors qualifying for honors in the department and required of all graduate students in chemistry. F. at 12. 2 s.h.

Professors Gross and Wilson, Assistant Professors
Vosburgh and Bigelow, and Dr. Hauser
256. Organic Analysis.-The elements of organic, qualitative and quantitative analysis, primarily for students taking organic research. Laboratory: nine hours to be arranged. 3 s.h.

Assistant Professor Bigelow and Dr. Hauser
Prerequisite, Chemistry 5 or equivalent.

FOR GRADUATES
350. Synthetic Organic Methods.-A lecture course, dealing with the application of synthetic organic methods in certain selected fields, such as dyes, pharmaceuticals, perfumes, terpenes, alkaloids, etc. One semes-ter-either fall or spring. Lectures and conferences to be arranged. 3 s.h.

Assistant Professor Bigelow
Prerequisites, Chemistry 5 or equivalent.
361-362. Chemical Thermodynamics.-A discussion of general chemical theory from the standpoint of thermodynamics. Three recitations. 6 s.h.

Offered in alternate years with Chemistry 363 . Professor Gross
363-364. Chemical Kinetics.-Theories of reaction velocity, catalysis, the theory of the solid state, the structure of atoms, the radiation theory. Offered in alternate years with Chemistry 361. 6 s.h.

Professor Gross
Prerequisite, Chemistry 6 or its equivalent.
365. Phase Rule.-A discussion of typical systems, isothermal curves, and space models. Three recitations. One semester-either fall or spring. 3 s.h.

Assistant Professor Vosburgh

## DEPARTMENT OF ECONOMICS AND POLITICAL SCIENCE

## FOR SENIORS AND GRADUATES

203. Money and Banking.-After a preliminary study of monetary history and theory, together with an account of the development of credit instruments, there follows a more extended presentation of the theory and practice of banking. First semester. 3 s.h.

Professor Glasson and Mr. Ratchford
Students who elect this course must have made a creditable record in course 1.
235. Public Finance.-This course deals with public expenditures, public revenues, public debts, and financial administration. Second semester. 3 s.h.

Professor Glasson and Mr. Ratchford
Students who elect this course must have made a creditable record in course 1.
237. American Federal Finance.-A survey of the organization and methods of contemporary American federal finance with special attention to tariff revision, public debt administration, and budgetary procedure. First semester. 3 s.h. Assistant Professor Gray
[By special permission, Seniors may substitute course 237 for course 235]
238. Industrial and Financial History of the United States.-The development of American industrial and financial institutions and their economic and ideological backgrounds. Second semester. 3 s.h.

Assistant Professor Gray
[By special permission, Seniors may substitute course 238 for course 203]
239. Statistical Methods.-Statistical analysis as a tool in investigation; its limitations, and the interpretation of statistical results. Methods especially applicable to economic data are given most attention. Two hours lecture and one laboratory period. First semester. 3 s.h.
[Not offered in 1930-31]

## Assistant Professor Gray

240. Statistical Analysis of Time Series.-A study of so-called business "cycles" and "barometers" and the analysis of other periodic economic phenomena. Prerequisite, course 239. Two hours lecture and one laboratory period. Second semester. 3 s.h.
[Not offered in 1930-31]
Assistant Professor Gray
241. Trade Unionism and Labor Problems.-Economic and industrial conditions that have given rise to unionism. A brief history of unionism in England and the United States. The structure, methods, and policies of modern unions. First semester. 3 s.h.

Professor Cotton
[By special permission, Seniors may substitute course 254 for course 105]
255. Industrial Relations.-This course deals with the fundamental principles underlying industrial relations. Policies and plans of the management concerning employees are discussed. The class will study the organization of the labor department of various industries. Course 254 is a prerequisite for this course. Second semester. 3 s.h.

Professor Cotton
[By special permission, Seniors may substitute course 255 for course 158]
265. International Trade.-An analysis of the theoretical principles underlying international trade together with an historical study of the
foreign trade and tariff policies of the United States, France, Germany, and England down to 1914. First semester. 3 s.h.

## Assistant Professor Roberts

266. Foreign Trade and Recent Commercial Policy.-A study of the influence on foreign trade of post-war protectionism, war debts, international capital movements, and inconvertible paper money. Practical problems in buying and selling abroad. Special attention given to Latin America. Second semester. 3 s.h. Assistant Professor Roberts
267. Econonic Systems.-A study of alternative economic systems. In addition to an analysis of communism, anarchism and the variants of socialism, the course will include a consideration of other proposed modifications of the existing economic order. First semester. $\mathbf{3} \mathbf{s . h}$.

Professor Hoover
215. Economic Functions of the State.-A consideration of the primary and secondary economic functions of government and of the legislation which provides for the performance of these functions, such as social legislation and the regulation of commerce and industry. Second semester. 3 s.h.

Professor Hoover

## FOR GRADUATES AND SENIORS BY SPECIAL PERMISSION

210. History of Political Economy.-This course traces the development of economic theory, giving special attention to the various schools of economic thought in England, France, Germany, and the United States. A large amount of collateral reading in the works of typical authors is required. Lectures and class-discussions. 6 s.h.

Assistant Professor Roberts
312. Value and Distribution.-This course is designed to introduce students to some of the more complex aspects of economic theory. Controversial phases of theory are surveyed through the medium of the works of the foremost modern economists. The course will also serve as a general review of economic theory for graduate students. 4 s.h.

Professor Hoover and Assistant Professor Roberts
349. Research in Corporation Organization and Finance.-Open to graduate students and, by special permission, to Seniors who have completed creditably courses 104 and 144. Second semester. 2 s.h.

Professor Glasson
275. Advanced Industrial Accounting and Management.-This course traces the ways and means of executive control through statistics and industrial accountancy. Emphasis is put upon the economics of overhead costs. A complete practice set of cost accounting is worked by each student during the course. 6 s.h.

Professor Cotton
Courses 105 and 7 are ordinarily prerequisites for this course.

## FOR GRADUATES

331. Advanced Banking.-This course is open to students who have completed creditably Economics 1 and Economics $3^{\text {a }}$ or equivalent courses in other institutions. The subjects for study will be found in the history, theory, and contemporary functions of the banking systems in the United States, England, and France. First semester, T. 3:30-5:30. 2 s.h.

Professor Glasson

## POLITICAL SCIENCE

## FOR SENIORS AND GRADUATES

228. American Political Institutions.-A study of the formation and development of the institutions of the national government in the United States. Federal organs of government are treated historically and analytically. 3 s.h.

Associate Professor Rankin
[Nat offered in 1930-31]
225. American Political Parties and Practical Politics.-A study of the historical development, organization, and methods of political parties in the United States. Special attention is given to current American politics. First semester. 3 s.h.

Associate Professor Rankin
226. Parliamentary Government.-This course, being a comparative study of popular government in modern states, deals particularly with the political systems of the British Empire, France, Germany, and Switzerland. Second semester. 3 s.h.

Associate Professor Rankin
208. American Constitutional Law and Theory.-Attention is given to leading constitutional principles of American government, as developed through judicial interpretation. Emphasis is placed upon problems of current importance. Lectures, reading of cases, assigned legal problems. First semester. 3 s.h.

Professor Wilson
264. Railroad Regulation in the United States.-A brief consideration of the general problem of governmental regulation of railroads is followed by a more intensive study of the powers and activities of regulatory bodies, state and federal. The latter part of the course deals with an analysis of the Transportation Act of 1920 and its administration up to the present time. Second semester. 3 s.h.

Professor Wilson
209. State Government in the United States.-The subject-matter covers the historical development of government in the states of the Union, the present political organization, and relations between state and federal government. First semester. 3 s.h. Associate Professor Rankin
294. City and County Government.-A study of the general problems of city government in the United States and in Europe. The latter part of the course is devoted to a study of county government in the United States, with particular reference to North Carolina. Second semester. 3 s.h.

Associate Professor Rankin
223. Political Thought to the Seventeenth Century.-In the course of a survey of political thought from the time of Plato and Aristotle to the seventeenth century, special emphasis is placed upon the development of important concepts in political theory. First semester. 3 s.h.

Professor Wilson
[Not offered in 1930-31]
224. Modern Political Theory.-The political theories of Hobbes, Locke, Rousseau, Montesquieu, Harrington, Burke, and John Stuart Mill are studied with particular reference to their influence upon American political thought. The latter part of the course deals with socialism and the modern idea of the state. Second semester. 3 s.h. Professor Wilson
[Not offered in 1930-31]
227. International Law and International Organization.-Elements of international law and the application of principles through recent judicial interpretation and in international negotiations. Particular attention is given to the manner in which the law has been interpreted and applied by the United States. The League of Nations and the Permanent Court of International Justice are studied in some detail. 6 s.h.

Professor Wilson
318. General Seminar in Economics and Political Science.-All graduate students with economics or political science as a major subject are members of this seminar. Reports of progress in research will be made, and there will be lectures and critical discussion by members of the department. T. at 7:30. 2 s.h.

Staff

# DEPARTMENT OF EDUCATION 

## ELEMENTARY EDUCATION

FOR SENIORS AND GRADUATES
207. Technique of Teaching.-An advanced course in the teaching process, dealing with the theory underlying sound technique and applied specifically to the work of the elementary school. Prerequisite : teaching experience or six semester-hours of work in materials and methods. First semester. 3 s.h.

Associate Professor Carr
212. The Curriculum and Materials of the Elementary Grades.-A study of curriculum problems in the elementary school. First semester. 3 s.h. Associate Professor Carr
[Not offered in 1930-31]
222. Methods of Teaching and Supervising the Fundamental Subjects.-An advanced course for teachers in service and for students who have completed at least twelve semester-hours of work in education. Second semester. 3 s.h.

Associate Professor Carr
[Not offered in 1930-31]
232. Elementary School Supervision.-A survey of supervision as a means of improving instruction and adapting the curriculum to child and community needs. Second semester. 3 s.h. Associate Professor Carr

## EXPERIMENTAL EDUCATION AND EDUCATIONAL PSYCHOLOGY

206. Psychological Principles of Secondary Education.-A study of adolescence and the psychology of learning as applied to teaching the principal high school subjects. 3 s.h.

## Professor Childs and Visiting Professor Troth

[Not offered in 1930-31]
209. Statistical Methods Applied to Education.-A study of statistical methods of treating educational and social data designed to enable teacher or administrator to interpret and use the results of scientific investigations in education. Second semester. 3 s.h.

Assistant Professor Dimmitt
[Not offered in 1930-31]
219. Experimental Education.-An introduction, including a brief historical survey of the field, to some of the most important problems and methods in experimental education. Experiments and reports in the general field of learning, the psychology of the school subjects, and related fields. First semester. 3 s.h. Professor Brownell
228. Psychology of Learning.-A study of methods of measuring and representing progress in learning, the conditions and factors influencing learning, individual differences, etc. Constant reference to experimental literature. First semester. 3 s.h.

## Assistant Professor Dimmitt

248. Investigations in Arithmetic.-An analytical survey of investigations in arithmetic with three purposes in view: (1) to examine the techniques employed with respect to their adequacy as means of solving the problems attacked; (2) to test the validity of the results announced and the value of these results for the teaching of arithmetic; (3) to locate further problems in arithmetic in need of scientific research. First semester. 3 s.h.

Professor Brownell

## FOR GRADUATES

318. Investigation of Study Problems.-A brief survey of the available literature on study, followed by extensive case-work in the study habits of high school and undergraduate college students. Diagnosis, corrective and remedial teaching in so far as possible, and reports. An introductory course in educational diagnosis and the treatment of individual differences. 3 s.h.

Professor
338. Investigations in Reading.-A summary of the results of the more important scientific studies in reading; interpretation of the results in terms of aims, methods, materials of instruction, testing, diagnosis, and supervision; emphasis of problems requiring further investigation. Prerequisite: nine semester-hours of Education. Second semester. 3 s.h.

Professor Brownell
348. Research in Arithmetic.-A course designed for students who have original problems in arithmetic which they desire to investigate. Such studies may be either individual or coöperative. Education 248 is advised as a preliminary course, but is not required. Second semester. 3 s.h.

Professor Brownell

## HISTORY AND PHILOSOPHY OF EDUCATION

## FOR SENIORS AND GRADUATES

200. Introduction to the Philosophy of Education.-A consideration of fundamental concepts underlying educational theory. First semester. 3 s.h.

Professor Holton
[Not offered in 1930-31]
214. History of Education in the United States.-A study of the development of the American public school and the interaction of higher education and the public school. First semester. 3 s.h. Professor Holton
224. Current Problems in Public Education as Revealed Through School Surveys.-A study of recent developments in public education as revealed through school surveys and resulting from the survey movement. First semester. 3 s.h.

Professor Holton
[Not offered in 1930-31]
234. Recent Movements in American Education.-An intensive study of educational thought and practice since 1900. First semester. 3 s.h.
[Not offered in 1930-31]
Professor Holton
244. Studies in the Historical Development of Public School Administration. -An advanced course devoted to the development of public school administration in the South, with especial reference to North Carolina as a type. First semester. 3 s.h.

Professor Holton
[Not offered in 1930-31]
254. History of Secondary Education in the United States.-A study of historical and comparative conceptions of the secondary school, changes in American life affecting the secondary school, present status of the secondary school, current tendencies toward expansion, and the problem of state and federal aid. First semester. 3 s.h. Professor Proctor
[Not offered in 1930-31]

## PUBLIC SCHOOL ADMINISTRATION

213. Secondary School Organization and Administration.-A study of the outstanding problems of secondary school organization and administration other than the problem of gradation and classification of pupils. Second semester. 3 s.h.

Professor Proctor
233. Administrative Pupil Accounting.-An advanced study of gradation and classification of pupils, with incidental attention to the keeping of records and the making of reports. The study includes a consideration of individual differences, promotions, acceleration, and retardation of
pupils; the various plans for classification and gradation; interpreting the results of tests; and some practice in the computation of statistical measures. First semester. 3 s.h.

Professor Proctor
253. Legal Phases of School Administration.-A study of judicial decisions and the development of outstanding features of statute law controlling school administration, with special emphasis upon North Carolina materials. Second semester. 3 s.h. Professor Holton

## FOR GRADUATES

323. Public School Finance.-A study of educational costs, sources of revenue for the support of public education, collection of revenue, basis of distribution, and accounting for funds spent. Second semester. 3 s.h.

Professor Proctor
343. State and County School Administration.-A study of state and county organization of public schools, emphasizing underlying principles. First semester. 3 s.h.

Professor Proctor
[Not offered in 1930-31]

# SECONDARY EDUCATION AND EDUCATIONAL SOCIOLOGY 

## FOR SENIORS AND GRADUATES

205. Sociological Foundations of the Secondary School Subjects.-A consideration of the aims and objectives of secondary school subjects, emphasizing practical problems of curriculum-making in the high school. Prerequisite: six semester-hours in education, including course 105. First semester. 3 s.h.

Professor Childs
215. Principles of Vocational Guidance.-A study of the objectives and underlying principles of vocational guidance, emphasizing this phase of education in North Carolina and the South. The study seeks to formulate a working program for vocational counsellors and others whose teaching function will involve problems of vocational and educational guidance. Prerequisite: six semester-hours in educational sociology, preferably courses 105 and 205. Second semester. 3 s.h.

Professor Childs
[Not offered in 1930-31]
225. Rural Sociology.-A study of rural life with emphasis upon the social and economic forces which apply to the life of the rural community. Second semester. 3 s.h. Professor Childs
[Not offered in 1930-31]
226. The Teaching of High School History.—Identical with History 212. The course counts as an elective in the Department of Education only when approved by the Department and the instructor. 6 s.h.

Associate Professor Shryock
235. Principles of Vocational Education.-A study of the social basis for vocational education; a brief review of the developments in the field urp
to the present time; an examination of the present practices in the main fields of agricultural, commercial, industrial, and home-making vocational education. Second semester. 3 s.h. Professor Childs
246. The Teaching of Mathematics.-Identical with Mathematics 204. The course counts as an elective in the Department of Education only when approved by the Department and the instructor. Second semester. 3 s.h.

Professor Rankin

## RESEARCH METHODS <br> FOR GRADUATES

300. Methods of Educational Research: Seminar.-Graduate students are instructed in methods of research as applied to selected educational problems. Each student must select for intensive study and practice a subject in which he is interested. This course is recommended for all graduate student taking major work in Education. First semester. 3 s.h. Professor Proctor and Other Members of the Department

## DEPARTMENT OF ENGLISH

FOR SENIORS AND GRADUATES
201-202. Anglo-Saxon.-This course requires no previous study of Anglo-Saxon. The first semester is given to a study of Anglo-Saxon grammar and to the reading of Anglo-Saxon prose; the second semester, to the reading and interpretation of Beowulf. 6 s.h. Professor Brown

203-204. Chaucer.-6 s.h.
Professor Baum
205-206. Middle English.-This course consists of an introduction to the study of early Middle English literature and of a study of the history of the English language. 6 s.h.

Professor Baum
Students may elect English 205-206 without having studied either Anglo-Saxon or Middle English.
[Not offered in 1930-31]
207-208. English Literature, 1400-1550.-6 s.h. Professor Baum
209-210. English Romances.-This course consists of a rapid reading of the chief romances of the Middle English period. 6 s.h.
[Not offered in 1930-31]
Professor Baum
211. English Literature, 1550-1625.-This course considers the most important non-dramatic literature from 1550 to 1625 except the works of Spenser. 3 s.h.

Professor Gilbert
212. English Literature, 1625-1660.-This course considers the most important works other than drama from 1625 to 1660 except the works of Milton. 3 s.h.

Professor Gilbert
213-214. The Ballad and Other Folk-Lore.-This course consists of an extensive study of the ballad and other ancient and modern folk-songs and of the other fifteen kinds of folk-lore as found in North Carolina
and other sections of America. Much of the material used in the course is in manuscript form, and still other material studied is that collected by the class during the year; thus the student gets training in collecting and classifying songs and other forms of folk-lore. Each student is assisted in developing some subject pertaining if possible to conditions in his native section. 6 s.h. Professor Brown

215-216. The Drama of the Elizabethan Period.-A study of the drama in England from its beginnings to 1640 . 6 s.h. Professor Gilbert

217-218. Spenser and Milton.-An exhaustive study of the works of Spenser and Milton.

Professor Gilbert
[Course 217 will be offered the second semester, 1930-31]
219. English Literature, 1660-1744.-3 s.h. Professor White
220. English Literature, 1744-1798.-3 s.h. Professor White
221. The Drama in England, 1640-1770.-3 s.h. Professor Baum
[Not offered in 1930-31]
223-224. Studies in the Romantic Poets of the Early Nineteenth Century.This course considers in an exhaustive manner the works of some of the Romantic poets. 6 s.h.

Professor White
225-226. Studies in Victorian Literature.-This course considers in an intensive way the works of some of the most important writers of the period. 6 s.h.

Professors Greene and Chase
227. Literary Criticism.-A history of literary criticism to 1700.3 s.h.

Professor Gilbert
228. Literary Criticism.-A history of literary criticism from 1700 to the present. 3 s.h.

Professor Gilbert
229-230. American Literature.-This course considers in an exhaustive manner the works of some of the American writers. 6 s.h.

Professor Hubbell
231-232. The Teaching of Literature and Composition in the High School.This course is intended especially for those students who expect to teach in the high schools and for teachers in the city or county who desire instruction in the teaching of English. The work of the course includes consideration of methods and aims in the study of literature and the writing of English, the nature and values of the various kinds of literature, the planning of the high-school course, and the study of the most important English classics in the high school curriculum. 6 s.h.

Professor Gilbert
This course is also open to teachers with experience.
[Not offered in 1930-31]
FOR GRADUATES
301-302. Bibliography and Methods of Research.-M.W. 3-4:30. 6 s.h.
Professors Hubbell and Baum

This course or its equivalent is required of all candidates for higher degrees in English.

303-304. The Elizabethan Period.-This course considers in an exhaustive manner the works of some of the Elizabethan writers. 3 s.h.

Professor Gilbert
[Not offered in 1930-31]
305-306. The Early Renaissance.-A seminar in the literature and language of the early Renaissance in England and Scotland. 3 s.h.
[Not offered in 1930-31]
Professor Baum
307-308. American Literature.-A seminar in American literature. 6 s.h.
Professor Chase
309-310. Chaucer.-Special studies in the works and language of Chaucer; lectures, reports, and a thesis. One semester. 3 s.h.

Professor Baum

## DEPARTMENT OF GERMAN

FOR SENIORS AND GRADUATES
201-202. Goethe.-This course is intended to acquaint the student with the methods of independent research while making a careful study of the author's most important works, with special emphasis upon the broader aspects of his ever-widening interests and literary activities. 6 s.h.

Professor Krummel
203-204. Leibnitz to Romanticism.-Eighteenth century German literature in its relation to contemporary European philosophy. Lectures, collateral reading. 6 s.h.

Professor Vollmer
205-206. Middle High German.-The language and literature of Germany's first classical period. Grammar and translation. First semester : Wright's Middle High German Primer, and Der arme Heinrich. Second semester: Das Nibelungenlied, Tristan und Isolde, or Parzival. 6 s.h. Professor Vollmer

## FOR GRADUATES

301-302. Gothic.-Phonology and morphology of Gothic as the basis of modern English and German. Reading of Ulfilas Gothic version of the Bible. 6 s.h. Professor Vollmer

303-304. German Seminar.-A seminar will be conducted for properly qualified students.

Professor Vollmer

## DEPARTMENT OF GREEK

FOR SENIORS AND GRADUATES
201-202. Greek Drama.-Selected plays are read, and their dramatic construction and distinctive features are discussed. 6 s.h.

Professor Peppler

203-204. Homer.-Odyssey. Pindar and Bacchylides.-6 s.h.
Professor Peppler
205-206. Greek Historians.-Herodotus, Books VII and VIII; Thucydides, Books VI and VII. 6 s.h.

Professor Peppler
207-208. Greek Orators.-Selected speeches. 6 s.h.
Professor Peppler
243. Greek Archaeology.-The topography and monuments of Athens are studied, and other matters supplementary to course 141-142 are presented. Course 243 is intended primarily for students who wish to prepare themselves for study in Greece or for work toward an advanced degree. Courses 105-106 (or its equivalent) and 141-142 are prerequisites. 3 s.h.

Assistant Professor Johnson
244. Greek Epigraphy.-The history of the alphabet is studied, and important inscriptions are read for their content. Prerequisite, Greek 107-108 or its equivalent. 3 s.h. Assistant Professor Johnson

FOR GRADUATES
301-302. Seminar in Aristophanes.-The student is required to read the eleven comedies, to prepare an analysis of one play and discuss important literary and historical questions suggested by it, and to write a grammatical and exegetical commentary on a selected passage. Lectures on the history of Greek comedy and a study of some of the important extant fragments will accompany the work in Aristophanes. 6 s.h.

Professor Peppler
303-304. Seminar in the Greek Historians.-Similar to course 301-302 in that the student reads prescribed portions of Herodotus and Thucydides, analyzes one book of Thucydides, and prepares a commentary on a selected passage. 6 s.h.

Professor Peppler

## DEPARTMENT OF HISTORY

## AMERICAN HISTORY

## FOR SENIORS AND GRADUATES

203. The Union, Confederacy, and Reconstruction.-Among the subjects considered are constitutional theories and sectional controversies, the rise of secession, the military strategy and conduct of the Civil War, constitutional and economic problems of the Union and Confederacy, and the political and economic adjustments during reconstruction. First semester, M.W.F. at 12. 3 s.h.

Professor Boyd
[Not offered in 1930-31]
210. Constitutional History of the United States, 1763 to 1860 .-A Among the subjects considered are the issues and nature of the Revolution, the problems of the Confederation, the nature of the constitution in the light
of its early interpretations, the rise of political parties, sectionalism and its attendant political and economic interests, and the slavery controversy. 6 s.h.

Professor Boyd
[Not offered in 1930-31]
230. The History of North Carolina.-The evolution of the commonwealth from its origins to the present is traced with particular emphasis on social conditions and the recent period. Second semester, M.W.F. at 12. 3 s.h.

Professor Boyd
[Not offered in 1930-31]
231. The Hispanic-American Republics.-A survey of the political, economic, and social development of the Hispanic-American nations since the beginning of the movement for independence in 1810. Considerable attention is also given to the foreign commerce and foreign relations of these nations. First semester, M.W.F. at 9:30. 3 s.h.

Professor Rippy
232. The Hispanic Colonies of the New World.-The development of the Iberian states as colonizing powers, the work of the conquerors, the Spanish colonial policy and system, their influences and results, native races, the international contest for supremacy, and the decay of Spanish power in America and the Philippines. Second semester, M.W.F. at 9:30. 3 s.h.

Dr. Lanning
[Not offered in 1930-31]

## FOR GRADUATES

206. Southern History, 1763-1860.-The rôle of the South in American political and social development is traced with special reference to local conditions, state and regional. Among the topics emphasized are political ideals and political parties, southwestern expansion, cotton culture and slavery, local sectionalism, transportation, education, the churches, and the movement for secession. First semester, M.F. at 4-6. 4 s.h.

Professor Boyd
307. The Colonial Period, 1606-1763.-Emphasis is placed on certain typical institutional and social origins and the development of British policy toward the colonies. M. 4-6. 4 s.h.

Professor Boyd
[Not offered in 1930-31]
315. Seminar in Southern History.-Selected topics in the development of the South Atlantic region, chosen from year to year, in different periods in its development. W. 4-5. 2 s.h.

Professor Boyd
321. Studies in the Diplomatic History of the United States.-A research course, open to students approved by the instructor. The aim is to give a familiarity with the sources and literature of South-American diplomatic relations and to investigate related topics in chosen fields from year to year. These fields are: (a) Independence movement of Latin America, (b) Latin-American Foreign Relations, (c) Sectionalism and American Foreign Relations. W. 4-6. 4 s.h.

Professor Rippy

## EUROPEAN HISTORY

## FOR SENIORS AND GRADUATES

204. English Constitutional History.-After a brief review of the AngloSaxon period a detailed study is made of those medieval institutions which form the basis of the British constitution. This is followed in the second semester by a general survey of the changes wrought in English political history during the seventeenth and eighteenth centuries, the main lines of constitutional development since 1800, and an outline of British government as it exists today. 6 s.h. Professor Laprade
[Not offered in 1930-31]
205. Europe Since 1870.—International relations since the Franco-German War is the chief subject of study in this course; special emphasis is placed upon the underlying economic and political influences. 6 s.h.

Associate Professor Carroll
218. The History of the European Proletariate.-This course is concerned chiefly with the origins, expansion, and organization of the industrial working classes of Europe. The following problems will be emphasized: the decline of serfdom, the growth of an urban working class, social revolutions in England, France, and Germany prior to the eighteenth century, the results of the Industrial Revolution, and labor movements and theories during the nineteenth and twentieth centuries. T.Th.S. at 9:30. 6 s.h.

Associate Professor Carroll
[Not offered in 1930-31]
222. Early Modern History.-A survey of the social and political changes in Western Europe during the fourteenth and fifteenth centuries, the Protestant Revolt and the Catholic Reaction of the sixteenth century, and the rise of toleration. T.Th.S. at 8:30. 6 s.h.

Assistant Professor Nelson
[Not offered in 1930-31]
223. Medieval Institutions and Culture.-A consideration of the classical heritage, the Germanic infusion, the development of ecclesiastical, feudal, monarchical, and communal institutions, the relations of church and state, the use of universities, vernacular literature, philosophy and art, 300-1300 A.D. 6 s.h.

Assistant Professor Nelson

## FOR GRADUATES

305. A Seminar in the History of England and the British Empire.-The work consists of practical training in the methods of historical research based on sources for modern British history. F. 7-8. 2 s.h.

Professor Laprade
325. British Nationality and Public Opinion.-A study of the various political and social groups that have contended for the control of English politics and government since the sixteenth century, the methods by which they sought to exercise that control, and the resulting influence on national ideals. 4 s.h.

Professor Laprade
327. Modern Phases of the English Constitution.-A brief review of the medieval constitution, followed by a more intensive study of certain aspects of its development in the sixteenth, seventeenth, and eighteenth centuries. 4 s.h.

Professor Laprade
[Not offered in 1930-31]
328. Foundations of the British Empire.-The growth of the British trade and colonization in the sixteenth, seventeenth, and eighteenth centuries, including the causes in Great Britain of the American Revolution. T. 4-6. 4 s.h.

Professor Laprade
[Not offered in 1930-31]

## THE TEACHING OF HISTORY <br> FOR SENIORS AND GRADUATES

212. The Teaching of History and Civics.-The work in the first semester consists of a discussion of the question of aims and values in teaching history and civics, textbooks, programs of study, methods of instruction, the use of maps and pictures, and some consideration of the problems of teaching history in the elementary schools. The second semester is devoted chiefly to the making and presenting of lesson-plans for use in the high school, to making assignments, and to other problems of high school teaching. T.Th.S. at 12. 6 s.h. Associate Professor Shryock

## BIBLIOGRAPHY

FOR GRADUATES
326. Historiography and Bibliography.-A survey of the development of historical writing, and examination of the greater collections of historical scurces, and a consideration of the inter-relationship of history and other branches of social knowledge. 2 s.h.

Members of the Department
[Not offered in 1930-31]

## DEPARTMENT OF LATIN AND ROMAN STUDIES

## FOR SENIORS AND GRADUATES

201. Roman Fiction.-Petronius and Apuleius; the Milesian tale and its influence.
[Not offered in 1930-31]
202. Early Latin Christianity.-Readings in Tacitus, Pliny, Minucius Felix, and the church fathers.
[Not offered in 1930-31]
One of the two following year-courses 203-204 or 205-206 will be offered in 1930-31:

203-204. Epic Poetry.-Vergil: a study of the Greco-Roman epic, its development, significance, and influence. Throughout the year. 6 s.h. Assistant Professor Gates

205-206. Roman Dramatic Literature.-Select Comedies of Plautus and Terence; select Tragedies of Seneca. Rapid reading course. Throughout the year. 6 s.h.

Assistant Professor Gates
209-210. Vulgar Latin and Introduction to Romance Philology.-
[Not offered in 1930-31]
216. Roman Topography and Remains.-Lectures and reports. Second semester. 3 s.h.

Professor Rosborough
FOR GRADUATES
301-302. Roman Life.-
[Not offered in 1930-31]
309-310. Sight Reading and Composition.-
[Not offered in 1930-31]
311. Latin Inscriptions.-Introductory course in Latin Epigraphy with study of inscriptions for their linguistic, historical, and literary significance. First semester. 3 s.h.

Professor Rosborough
321-322. Seminar.-Training in criticism and research. In 1930-31 the work will probably be based on Plautus. Throughout the year. 6 s.h. Professor Anderson
325-326. Linguistics.-The forms and flexions of Latin and Greek; the development of the study of syntax among the Greeks; the historical syntax of Latin. Throughout the year. 6 s.h.

Professor Anderson

## 331-332. Roman Historical Literature.-

[Not offered in 1930-31]

## DEPARTMENT OF MATHEMATICS

All the courses listed will not be given every year. For a major in this department the required number of hours must be made up from a group of courses approved by the department and not selected at random. Graduate students are expected to have undergraduate credit for several of the courses listed below before they begin their program of graduate work.

## FOR SENIORS AND GRADUATES

201. History of Mathematics.-This course deals with the evolution of the following topics: number system, arithmetic, geometry, algebra, trigonometry, analytical geometry, calculus, modern geometry. Brief sketches of the lives of the builders of mathematics will be given. 3 s.h.

Prerequisite, course 30 .
Professor Rankin
204. Teaching of Mathematics.*-This course is designed primarily for those who intend to teach high school and college mathematics. It deals with the recent changes in methods of studying mathematics. 3 s.h.

Prerequisite, course 30 .
Professor Rankin

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## 225. Theory of Equations and Determinants.-3 s.h.

Assistant Professor Patterson
Prerequisite, course 25.
231. Differential Equations.-A study of the more common types of ordinary differential equations. Primarily a problem course for engineers. 3 s.h.

Professor Elliott
Prerequisite, course 30.
235. Modern Higher Algebra.-A study of linear dependence, solution of a set of linear equations. Study of matrices, linear transformations, invariants of linear transformations, bilinear forms. Either semester. 3 s.h.

Assistant Professor Robison
Prerequisite, course 25.
239-240. Advanced Calculus.-This course is a study of the processes of the calculus, their meanings and applications. It is designed to furnish a necessary preparation for advanced work in analysis and applied mathematics. 6 s.h.

Professor Elliott
Prerequisite, course 30.
250. Modern Geometry.-Modern geometry of the triangle, transversals, harmonic sections, harmonic properties of the circle, inversions, poles, polars, etc. Valuable to teachers of high school geometry. 3 s.h.

Professor Rankin
Prerequisite, course 25.
255-256. Projective Geometry.-The elements of projective geometry treated synthetically. Introduction to homogeneous coördinates with application to projective geometry. Study of different types of collineations. 6 s.h.

Assistant Professor Robison
Prerequisite, course 25.
259-260. Analytic Geometry of Space.-The usual topics treated in cartesian and homogeneous coördinates. An introduction to differential geometry is included. 6 s.h.

Professor Elliott
Prerequisite, course 25.
275. Probability.-Introductory course. Combinatory analysis, mean values, Bernoulli's theorem, the probability integral, statistics. 3 s.h.

Assistant Professor Miles
Prerequisite, course 30.
276. Probability.-Continuation of course 275. Geometrical probability, probability of causes, theory of errors, applications. 3 s.h.

Assistant Professor Miles
280. Fourier's Series and Spherical Harmonics.-The properties of Fourier's Series and spherical harmonics with application to problems of mathematical physics. Either semester. 3 s.h.

Assistant Professor Robison
Prerequisite, course 30.
284. Vector Analysis.-This course is a study of the different vectur products and the calculus of vectors, with applications to geometry and mechanics. 3 s.h.

Professor Elliott
Prerequisite, course 30.

## FOR GRADUATES

325. Functions of a Real Variable.-A study of some of the modern theories of integration, particularly those of Lebesgue, Stieltjes and Daniell. 6 s.h.

Assistant Professor Miles
Prerequisite, course 240.
330. Theory of Functions of a Complex Variable.-Study of analytic functions; conformal representation; the theory of infinite series and products with application to hyperbolic and Gamma functions; study of double-periodic functions. 6 s.h. Assistant Professor Robison

Prerequisite, course 240.
335. Infinite Series.-The theory of convergence and the algebraic and functional properties of series; special types of series; infinite products; divergent series. 6 s.h.

Assistant Professor Robison
Prerequisite, course 240.
340. Integral Equations.-A study of the Volterra and Fredholm integral equations with special reference to their application to boundary problems of differential equations. 6 s.h.

Professor Elliott
Prerequisite, courses 230, 240.
342. Theory of Differential Equations.-Existence and nature of solutions of ordinary differential equations, algebraic theory of linear differential systems, boundary problems. 6 s.h.

Professor Elliott
Prerequisites, courses 230, 240.
345. Calculus of Variations.-This course will take up the study of the calculus of variations after the methods of Euler, Jacobi, Weierstrass, and Bolza. 6 s.h.

Assistant Professor Hickson
Prerequisite, course 240.
350. Differential Geometry.-An elementary course in differential geometry. A study of the differential geometry of curves, surfaces, and curves on surfaces. 6 s.h.

Assistant Professor Hickson
Prerequisites, courses 230, 240.
355. Algebraic Geometry.-The general theory of algebraic curves with applications to cubic curves. Study of certain types of transformations. 3 s.h.

Assistant Professor Robison
Prerequisite, course 255.
375. Partial Differential Equations.-A study of some of the important types of differential equations of mathematical physics. 6 s.h.

Prerequisites, courses 230, 240.
Assistant Professor Miles
380. Potential Theory.-Newtonian and logarithmic potentials and their properties, Laplace's equation in potential theory and mathematical physics. 6 s.h.

Assistant Professor Miles

## DEPARTMENT OF PHILOSOPHY

Odd-numbered courses are offered in the first semester, even-numbered courses in the second semester.

FOR SENIORS AND GRADUATES
203. The Philosophy of Conduct.-This course attempts a critical inquiry into the fundamental concepts and principles of human conduct. These are approached from the standpoint of nature, psychology, and philosophy. It analyzes the content of moral consciousness and seeks to find the laws that rule in the realm of virtue and finally to discover the ultimate nature of the right. Lectures and textbook. Text used: Everett's The World of Values. 3 s.h.

Professor Cranford
204. Christian Ethics.-This course attempts a critical inquiry into the fundamental concepts and principles of conduct in the light of Christianity. It seeks to show the practical application of these concepts and principles in a doctrine of Christian virtue and duties. Lectures and textbook. Text used: Smythe's Christian Ethics. 3 s.h.

Professor Cranford
205-206. Idealism.-A survey of idealistic systems of philosophy, with chief emphasis on the more recent developments in idealistic thinking. Lectures and assigned readings with reports. Prerequisite, Philosophy 101 or 102. 6 s.h.

Professor Cranford
208. A Constructive Survey of Modern Science.-An orientation course, designed to present a synthetic view of nature from the data of the modern sciences. It is aimed to be corrective of the tendencies toward over-specialization. Two lectures and one discussion hour. 3 s.h.

Assistant Professor Rhine
213-214. Philosophy of the Seventeenth Century.-The center of this course will be a detailed study of Spinoza's Ethics, but attention will be given to his contemporaries, Descartes and Leibnitz, and to the contrast between the rationalism of these thinkers and the empiricism of the British philosophers, Locke, Berkeley, and Hume. Lectures and reports. 6 s.h.

Professor Gilbert
215-216. History of Aesthetic.-The tracing of the historical solutions of traditional problems, such as the nature of imitation, symbolism, the ugly, the sublime, and the comic, the relation of art to nature, to morals, and to economics, the relation of the particular arts to each other, the standard of taste. General theories will be illustrated and tested by examples from the arts. Reading and discussion. 6 s.h.

Professor Gilbert
231. History of Ancient Philosophy.-The history of European philosophical speculation from its rise among the Greeks to the time of Proclus. Lectures, study of texts, reports. First semester, M.W.F. 10. 3 s.h.

Professor Widgery
[Not given in 1930-31]
232. History of Modern Philosophy.-The history of occidental philosophy from Descartes to the middle of the nineteenth century, with special reference to Descartes, Spinoza, Leibnitz, Hume, Berkeley, Kant, and Hegel. Lectures, study of texts, reports. Second semester, M.W.F. 10. 3 s.h.

Professor Widgery
[Not given in 1930-31]
233-234. Contemporary Philosophy.-A study of the leading philosophical movements in Europe and America in the last fifty years. Lectures, discussions, and reports. Throughout the year. M.W.F. 10. 6 s.h.

Professor Widgery
241. Comparative Ethics.-A comparative study of the ethics of the great culture systems and religions, including Egyptian, Babylonian, Greek and Roman, Hindu, Buddhist, Zoroastrian, Jain, Confucian, Sikh, Jewish, Moslem, and Christian. Lectures and reports. First semester, M.W.F. 11. 3 s.h.

Professor Widgery
242. Aesthetics.-An analytic consideration of the beautiful, of aesthetic appreciation and artistic creation, with reference to classical periods in the history of art. Lectures, discussions, reports. Second semester, M.W.F. 11. 3 s.h. Professor Widgery
[Not given in 1930-31]
252. The Philosophy of History.-An enquiry into the logic and methodology of the knowledge of history, and into the metaphysical implications of history. Lectures, discussions, reports. Second semester, M.W.F. 11. 3 s.h.

Professor Widgery
261-262. The Philosophy of Religion.-A critical consideration of the data of empirical religion and the constructive development of a modern philosophy of religion. Prerequisite, SR $10^{a}$ or SR $2^{a}$ or SR $2^{b}$. Lectures, discussions, reports. 6 s.h.

Professor Widgery
FOR GRADUATES
301-302. Seminar in Philosophy.-For the discussion of special problems, chiefly metaphysical. Two hours a week throughout the year. Time to be arranged. 4 s.b.

Professor Widgery

## DEPARTMENT OF PHYSICS

## FOR SENIORS AND GRADUATES

The following courses are arranged primarily for senior students, but they are open to graduate students. An elementary knowledge of the calculus and credit for 12 semester-hours in Physics is presumed in all of the following courses.

201-202. Prisciples of Radio Transmission and Reception.-A course covering the general theory of wave propagation and including a study of inductance, capacity, induction coils, oscillatory discharge, high frequency generators and transformers, and the various methods of detecting electromagnetic waves. 6 s.h.

Assistant Professor Collins

203-204. Analytical Mechanics.-Geometry of motion; kinematics of a particle and of a rigid body; statics, kinetics, of a particle and of a rigid body; relative motion; Lagrange's equations; general principles of mechanics. M.W.F. at 9:30. 6 s.h. Assistant Professor Collins
205. Physical Optics.-This course is a treatment of the subject of light adapted to the needs of students completing general physics and is of special interest to chemical and pre-medical students. The course is based on Taylor's Advanced Optics. First semester, M.W.F. at 12. 3 s.h.

Professor Hatley
206. Modern Physics.-A lecture course consisting of a rapid review of the entire field of physics with special emphasis on the outstanding experiments underlying modern physics. Second semester, M.W.F. at 12. 3 s.h.

Professor Hatley
207-208. Electricity and Magnetism.-This course covers the fundamental phenomena of direct and alternating currents and magnetism. Starling's Electricity and Magnetism is used as the basis of the lectures. Smith's Electrical Measurements is used as a guide in the laboratory exercises. Two lectures and one laboratory period a week, throughout the year. 6 s.h.

Professor Edwards
[Under special conditions a credit of either 2 or 4 semester-hours may be arranged.]
209. Thermodynamics.-Thermodynamics is the science on which is based all of the physico-chemical sciences. This introductory course deals with basic principles freed from all unnecessary complications. Hence it covers neither the theory applied to heat engines nor, in detail, the theory of chemical equilibrium. It is in a sense preparatory to such studies. First semester, M.W.F. at 8:30. 3 s.h. Professor Edwards

FCR GRADUATES
301-302. Advanced Physical Laboratory.-Mechanics, heat, radiation, electrical measurements, ionization, and radio activity. This course involves exact measurements in all the fields indicated. Classical experiments are repeated by much the same methods as were employed by the original investigators. Two laboratory periods per week. 2-6 s.h.

Professors Edwards and Hatley, Assistant Professors Collins and Nielsen
304. Kinetic Theory of Gases.-Fundamental ideas of equations of state, laws of gases, Maxwell's distribution law, equipartition law, viscosity, diffusion, thermal conductivity, and specific heats. Second semester. 3 s.h.

205-206. Theoretical Physics.-This is an advanced course in general physics covering the elementary mathematical theory of mechanics, electrodynamics, hydrodynamics, thermodynamics, etc. A knowledge of the calculus is presumed and it is desirable that a student take concurrently Differential Equations. M.W.Th.F. at 8:30. 8 s.h.

Assistant Professor Nielsen
309. Conduction of Electricity Through Gases.-Electron theory of gaseous conduction. First semester. 3 s.h. Professor Edwards
312. Spectroscopy.-A laboratory course interspersed with occasional lectures dealing with standard practice in spectroscopy. Second semester, M.W.F. at 8:30. 3 s.h.

Professor Edwards
313-314. Thermionic Vacuum Tubes and Radio-Frequency Measurements.A laboratory course in radio measurements. Course 201-202 is a prerequisite of this course. 6 s.h. Assistant Professor Collins

315-316. Quantum Theory.-Application of the quantum theory to pho-to-electricity, resonance and ionization potentials, X-rays, radioactivity, spectral lines and fine structure, Stark and Zeeman effects, thermal radiation, and specific heats. Three lectures per week. Prerequisite, Theoretical Physics. 6 s.h.

Assistant Professor Nielsen
317. Electron Theory.-This course deals with such phases as the charge and mass of the electron, scattering of high speed charged particles by thin foils of matter, isotopes, atomic disintegration, nuclear and atomic structure, radiation, and ionization potentials. First semester. 3 s.h.

Professor Hatley
320. X-rays.-The properties of X-rays are interpreted in terms of the interaction between radiation and electrons. An effort is made to gain from a study of available X-ray data a better understanding of the structure of the atom and of the nature of X-rays themselves. Second semester. 3 s.h.

Professor Hatley

## DEPARTMENT OF PSYCHOLOGY

FOR SENIORS AND GRADUATES
201. Social Psychology.-Lectures, readings, and reports. First semester, M.W.F. 3 s.h.

Professor McDougall
202. Abnormal Psychology.-Lectures, readings, and reports. Second semester, M.W.F. 3 s.h. Professor McDougall
203. Advanced Experimental Psychology.-A laboratory course designed to give first-hand acquaintance with experimental technique and methodology. First semester, M.W.F. Six laboratory hours. 3 s.h.

Assistant Professor Zener
209. Experimental Psychology: Problems and Theories.-An historical survey of experimental psychology, with a critical study of selected problems and theories. First semester, M.W.F. 3 s.h.

Assistant Professor Zener
204. Physiological Psychology: Nerve Conduction and Reflex Action.-A consideration of the functional properties of the nervous system. Two hours lecture, six hours laboratory. Second semester, M.W.F. 4 s.h. Assistant Professor Zener
[Not offered in 1930-31]
206. Physiological Psychology: Development of Structure.-A study of the structure and function of the central nervous system from the embryological and comparative viewpoints. Two hours lecture, six hours laboratory. Second semester, M.W.F. 4 s.h.

Assistant Professor Zener
[Not offered in 1930-31]
220. Advanced Psychology of Religion.-See Religious Education.

Professor Hickman
219. Introduction to the Psychology of Religion.-See Religious Education.

Professor Hickman
224. A Constructive Survey of Modern Science.-See Philosophy.

Assistant Professor Rhine

FOR GRADUATES
300. Seminar in Advanced Psychology.-Seminar on special problems. Two-hour session twice a week. Second semester.

Professor McDougall

## DEPARTMENT OF RELIGION*

NEW TESTAMENT
FOR SENIORS AND GRADUATES
213-214. The Beginnings of Christianity.-A survey course dealing with the background, the beginnings, and the early history of Christianity. Special attention is given to the creation of the literature of the New Testament. M.W.F. at 9:30. 6 s.h. Professor Branscomb
217. The New Testament in Greek.-Rapid reading in Greek text of the New Testament. Prerequisite, six semester-hours study of the Greek language. T.Th.S. at 9:30. 3 s.h..

Professor Branscomb
218. The Exegesis of Selected Books of the New Testament.-The books studied will be Galatians, Colossians, and Hebrews. The course will be based on the Greek text. T.Th.S. at 9:30. 3 s.h. Professor Russell
219. Life of Paul.-A study of Paul's life on the basis of Acts and the epistles. Consideration is given to Paul as a man, the factors entering into his character, and his permanent contribution to the world. 3 s.h.

Professor Myers
[Not offered in 1930-31]

## FOR GRADUATES

311. The Life and Teachings of Jesus.-Prerequisite, New Testament 213. Th.F.S. at 11. 3 s.h. Professor Branscomb

[^72]312. New Testament Theology.-The teaching of the books of the New Testament in their historical development. Prerequisite, New Testament 311. M.T.W. at 11.

Professor Russell
313. The Exegesis of Selected Books of the New Testament.-The books studied will be I Corinthians, II Timothy, I Peter, and selections from the Apocalypse of John. The study will be based on the Greek text. Prerequisite, New Testament 217, or its equivalent. Th.F.S. at 11. 3 s.h.

Professor Russell
314. The Exegesis of Selected Books of the New Testament.-The books studied will be Romans, James, and the First Epistle of John. The study will be based on the English text. Prerequisite, New Testament 213214, or its equivalent. Th.F.S. at 11. 3 s.h. Professor Branscomb
315. Judaism at the Beginning of the Christian Era.-A study of Judaism from the time of Ben Sirach to the writing of the Mishna. Prerequisite, New Testament 213-214, or its equivalent. Th.F.S. at 11. 3 s.h.

Professor Branscomb
[Not offered in 1930-31]
316. Hellenistic Religions at the Beginning of the Christian Era.-Prerequisite, New Testament 213-214. Th.F.S. at 11. 3 s.h.

Professor Russell
[Not offered in 1930-31]

## OLD TESTAMENT

## FOR SENIORS AND GRADUATES

201-202. Introductory Hebrew.-A study in the Hebrew language. The reading of the first eight chapters of Genesis inductively. T.Th.S. at 8:30. 6 s.h.

Professor Godbey
203-204. Introduction to the Old Testament.-The origin, literary form and contents of the books of the Old Testament in their historical setting. M.W.F. at 8:30. 6 s.h.

Professor Russell

## FOR GRADUATES

301. Old Testament Theology.-The religious and ethical teachings of the books of the Old Testament in their historical development. Prerequisite, Old Testament 203-204. M.T.W. at 11. 3 s.h.

Professor Russell
302. The Exegesis of Selected Books of the Old Testament.-The books to be studied will be chosen from the following list: Job, Second Isaiah, Zechariah, the Psalms. The study will be based on the English text. Th.F.S. at 11. 3 s.h.

Professor Russell
305-306. Pre-Mosaic Hebrew Religion.-Its historical portrayal in the Old Testament. Prolegomena to the study of Old Testament history and literature. No knowledge of Greek required. M.W.F. at 12. 6 s.h.

307-308. The Old Testament in Hebrew.-Parts of the pentateuch are read during the first semester. Selections from the prophets are the basis for the study in the second semester. Prerequisite, Old Testament 201-202 or equivalent. Th.F.S. at 12. 6 s.h. Professor Godbey

309-310. Ancient Oriental History.-The aim of this course is to show the relations of Minoan, Philistine, Ancient Egyptian, and Assyro-Babylonian history and literature to the Old Testament and to the early history of the Hebrews. M.T.W. at 8:30. 6 s.h. Professor Godbey

## CHRISTIAN DOCTRINE

FOR GRADUATES
321. Introduction to the Science of Theology.-A consideration of theology as a branch of science and an indication of some of the results obtained through the use of the scientific method in theological investigation. M.W.F. at 8:30. 3 s.h.

Professor Rowe
322. The Content of Christian Doctrine.-A comprehensive survey of the leading doctrines of Christianity in the light of religious thought and experience of the present age. M.W.F. at 8:30. 3 s.h.

Professor Rowe
323. Theology in Ancient and Medieval Christianity.-The history of Christian thought from the Greek Fathers to the Scholastics with special attention to the ecumenical creeds. M.T.W. at 9:30. $\mathbf{3}$ s.h.

Professor Rowe
324. Theology in Modern Christianity.-The history of Christian thought from the beginning of the Reformation to the present time. M.T.W. at 9:30. 3 s.h.

Professor Rowe
325. Soteriology.-A study of the Christian doctrine of salvation and a comparison of the various ways by which the saving power of God is thought to take effect in personal and social life. M.T.W. at 9:30. 3 s.h.

Professor Rowe
[Not offered in 1930-31]
326. Eschatology.-A study of "the last things" in the light of the Christian hope for the individual and for society with special emphasis upon personal immortality. M.T.W. at 9:30. 3 s.h.

Professor Rowe
[Not offered in 1930-31]

## HISTORY OF RELIGION AND MISSIONS

## FOR SENIORS AND GRADUATES

281. The Nature and Early Development of Religion.-Introduction to the early history of religion, the beliefs and practices of the more primitive peoples, and the religious life of the ancient world. T.Th.S. at 9:30. 3 s.h.

Professor Cannon
282. Living Religions of the World.-A survey of the religious systems of India, China, and Japan, followed by a study of Judaism, Mohammedanism, and Christianity, the object being to trace the historical development of each religion. T.Th.S. at 9:30. 3 s.h.

Professor Cannon
283. Expansion of Christianity.-Apostolic missions, conquest of the Roman Empire, winning of northern Europe, the modern missionary era, status of missionary work in important areas, social aspects of missions, missionary biography. T.Th.S. at 11. 3 s.h.

Professor Cannon
284. Principles of Missions.-The great missionary agencies, their foundation and growth; creation and cultivation of the missionary spirit at the home base; training and work of the pastor; principles and practice of missionary education; organization of the local congregation for its missionary tasks. M.T.W. at 11. 3 s.h. Professor Cannon

FOR GRADUATES
381. Leading Ideas of Religion.-The idea of God and the doctrine of $\sin$ and salvation in the religions of the world. Prequisite, History of Religion and Missions 281 or 282. M.W.F. at 9:30. 3 s.h.

Professor Cannon
382. Leading Ideas of Religion.-The conception of the future life and ethical ideals and practice in the religions of the world. Prerequisite, History of Religion and Missions 281 or 282. M.W.F. at 9:30. 3 s.h. Professor Cannon
383. Buddhism.-India at the rise of Buddhism. Life of the Buddha and the teachings of early Buddhism. Development into the Hinayana and Mahayana schools, its spread and present condition in southern and eastern Asia. Prerequisite, History of Religion and Missions 282. M.W.F. at 9:30. 3 s.h.
[Not offered in 1930-31]
384. Mohammedanism.-The life of Mohammed and the religion of Islam, special attention being given to the Koran and its teaching. The aim is to interpret Mohammedanism as a force today. Prerequisite, History of Religion and Missions 282. M.W.F. at 9:30. 3 s.h.

Professor Cannon
[Not offered in 1930-31]
385. Christianity and World Movements.-Relation of Christianity to significant world movements, race, war, industry, world peace. T.Th.S. at 11. 3 s.h.

Professor Cannon
[Not offered in 1930-31]
386. Missionary Problems.-Needs of particular fields, types of work, relations of older and younger churches, nationalist movements, qualifications and training of candidates, education and other selected problems. Prerequisite, History of Religion and Missions 283 or 284. T.Th.S. at 11. 3 s.h.

Professor Cannon
[Not offered in 1930-31]

## CHURCH HISTORY

FOR SENIORS AND GRADUATES
233. Church History to the Reformation.-A survey of the growth of the Christian Church from the Apostolic Age to the Reformation. M.W.F. at 11. 3 s.h.

Professor Garber
234. History of the Evangelical Movement.-Beginning with the Lutheran Reformation, this course traces the rise, growth, influence, and history to 1800 of the Calvinistic, Anglican, Reformed, Quaker, Baptist, and Methodist movements. M.W.F. at 11. 3 s.h. Professor Garber

## FOR GRADUATES

333. The Denominations in America: the Colonial Period.-A study of the transfer of the various denominations to the English colonies, and their problems to the Revolutionary War. Prerequisite, Church History 233234. M.W.F. at 9:30. 3 s.h.

Professor Garber
334. The Denominations in America: the National Period.-Major emphasis is placed upon relations of church and state, steps toward Christian unity, the small sects, the Young People's Movement, Christian education and modern theological issues. Prerequisite, Church History 233-234. M.W.F. at 9:30. 3 s.h.

Professor Garber
335. Methodism.-A study of the beginnings and growth of the Methodist societies in England, of early Methodism in America, and of the development of the several branches of the Methodist church in America, and distinctive principles of Methodism. Prerequisite, Church History 233-234. M.T.W. at 12. 3 s.h.

Professor Garber
336. Great Men of the Christian Church.-A study of outstanding individuals who have in different ways influenced the thought and program of the Christian Church. The life, work, and contributions of about twenty representative Christian leaders. Prerequisite, Church History 233-234. M.T.W. at 12. 3 s.h.

Professor Garber
337. Protestantism and Catholicism in Europe since 1800.-A comprehensive study of the religious situation in Europe in modern times, emphasizing the papacy in the age of nationalism; relations of church and state; German theology of the nineteenth century; and the Oxford movement. Prerequisite, Church History 233-234. M.T.W. at 12. 3 s.h.

Professor Garber
[Not offered in 1930-31]

## RELIGIOUS EDUCATION

FOR SENIORS AND GRADUATES
261. Administration and Supervision of Religious Education.-Deals with problems of administering and supervising the religious education program of the local church. Designed especially to train ministers and other administrative leaders in religious education. Methods of correlation and integration are considered. T.Th.S. at 12. 3 s.h.
262. Surveys, Tests, and Measurements.-Study of the methods of getting the facts in religious education. Consideration of underlying principles, techniques, and available materials. Special attention to procedure in a local church. T.Th.S. at 12. 3 s.h. Professor
265. Curriculum of Religious Education.-Study of various theories of the curriculum of religious education, conception of the curriculum as enriched and controlled experience, analysis of existing curricula and critical evaluation of same. M.W.F. at 8:30. 3 s.h. Professor Spence
[Not offered in 1930-31]
267. Religious Education in the Community.-This course considers the larger relations of religious education to public education and sther community agencies, and also the need, organization, program, and types of week-day religious education and the vacation church school. M.W.F. at 8:30. 3 s.h.

Professor Spence
268. Materials of Character Education.-A study of the Bible and other great religious literature for their contributions to character formation at each given stage of character development. Special emphasis on story material and modern religious poetry. M.W.F. at 8:30. 3 s.h.

## Professor Spence

269. Principles and Program of Character Education.-Theory and methcds of character education. Study of experiments made in this field. While primary consideration is given character building in religious education, the development of character education in the public schools will also be carefully surveyed. T.Th.S. at 8:30. 3 s.h.

## Professor

270. Religious Education in the Home.-Deals with special problems in connection with making the home an effective religious educational agency. Study of family relationships, worship habits, attitudes, and ideals. Coöperation of the home with other agencies in the moral and religious development of the child. T.Th.S. at 8:30. 3 s.h.

Professor
271. Research in Religious Education.-For advanced students and especially those majoring in religious education. Offers direction in the use of various techniques and methods for both field and library investigations. (All professors in the department are available for special counsel.) T.Th.S. at 12. 3 s.h.

Professor
272. Philosophy of Religious Education.-For advanced students interested in problems growing out of the philosophical implications of religious education. Critical examination of various theories and principles underlying modern procedure in religious education. Prerequisite, Religious Education 261. T.Th.S. at 12. 3 s.h. Professor
273. Curriculum Construction.-This course deals with the processes of research, construction, and experimentation used in curriculum making. Actual curriculum construction will be undertaken. M.W.F. at 8:30. 3 s.h.

Professor Spence
[Not offered in 1930-31]
275. Introduction to the Psychology of Religion.-Study of the major factors of religious experience, together with conditions bearing upon its genesis and growth. T.Th.S. at 8:30. 3 s.h. Professor Hickman
276. Advanced Psychology of Religion.-Psychological study of such problems as worship, prayer, and various types of belief. Some attention to special problems. Prerequisite, Religious Education 275 or its equivalent. T.Th.S. at 8:30. 3 s.h.

Professor Hickman

## FOR GRADUATES

371. The Religious Experience of the Child.-A psychological study of the developing religious experience of childhood, involving a consideration of the principles of genetic psychology. Prerequisite, one course in general psychology. M.T.W._at 11. 3 s.h. Professor Hickman
372. The Religious Experience of Youth.-(Continues the study begun in Religious Education 371 and is along the same lines.) Prerequisite, one course in general psychology. M.T.W. at 11. 3 s.h.

Professor Hickman
373. The Psychology of Mysticism.-A brief historical review of the principal phases of mysticism in religion, followed by a psychological analysis to estimate the abiding worth of mysticism in religious experience. Prerequisite, Religious Education 275 or equivalent. M.W.F. at 11. 3 s.h.

Professor Hickman
[Not offered in 1930-31]

## HOMILETICS AND PRACTICAL THEOLOGY

FOR SENIORS AND GRADUATES
251. The Church and Rural Sociology.-A study of the religious, social, educational, and economic conditions of the country; the historical development of the church in the midst of rural social relations; an attempt to discover the present social obligation of the church. T.Th.S. at 8:30. 3 s.h.

Professor Ormond
252. Rural Church Administration.-This course will deal with the functions of the rural church; the minister's attitude toward rural life, his mission to the rural people, as well as his service in managing the organization of and supervising the church program. T.Th.S. at 8:30. 3 s.h. Professor Ormond
FOR GRADUATES
343. Psychology of Preaching.-A psychological study of the preaching motive, the relation of the preacher to his congregation, and the relation of the preacher to society in general. T.Th.S. at 9:30. $\mathbf{3}$ s.h. Professor Hickman
[Not offered in 1930-31]
344. History of Preaching.-An historical study of the development of Christian preaching from the apostolic period to the present time. Em-
phasis is laid upon the personality and the homiletical methods of great preachers, studied in their true historical perspective. T.Th.S. at 9:30. 3 s.h.

Professor Hickman
[Not offered in 1930-31]

## DEPARTMENT OF ROMANCE LANGUAGES

FOR SENIORS AND GRADUATES
215-216. The Modern French Novel.-A survey from Madam de Lafayette to Paul Bourget with particular reference to the effect of literary movements upon the evolution of novel technique. 6 s.h.

Professor Jordan
217-218. The French Language.-French phonetics, composition, dictation, conversation, lectures in French. 6 s.h. Professor Webe
219. Old French.-An introduction to the Old French language and literature. Brief study of Old French grammar; the Chanson de Roland ; lectures. 3 s.h.

Professor Cowper
220. Old French.-Types of Old French literature. Reading of typical Romans d'adventure, lectures. 3 s.h.

Professor Cowper
221. Rousseau and the Beginnings of Romanticism. -3 s.h.

Professor Cowper
[Not offered when Old French is given]

## FOR GRADUATES

French 223-224.-A study of the literary and critical theories underlying the movements of realism and naturalism. Representative authors of the period $1850-90$ are read, and individual problems are assigned, mainly in the field of the novel. 6 s.h.

# DEPARTMENT OF SOCIOLOGY 

FOR SENIORS AND GRADUATES
205. Social Pathology.-A study of the causes, extent, significance, and constructive treatment of the principal forms of pathology in modern society: Poverty, physical defectiveness, malnutrition, feeble-mindedness, insanity, undirected leisure activities, and unstandardized commercial recreation, alcoholism, prostitution, vagrancy, and delinquency. First semester, M.W.F. at 11. 3 s.h.

Professor Ellwood
206. Criminology.-Prerequisite, course 1. A study of the original tendencies of man and the problem of socializing these tendencies; the relation of physical and mental defectiveness and untoward influences in the home and neighborhood to crime; the development of criminological theory and procedure, emphasizing penal and reform methods, and especially modern methods of social treatment and prevention of crime. Second semester, M.W.F. at 11. 3 s.h. Professor Ellwood
212. Child Welfare.-A study of heredity and environment as factors in personality development; infant conservation; welfare responsibilities of the school, emphasizing the physical and mental well-being of the child, play, and compulsory and industrial education; child labor, diagnosis and treatment of delinquency ; care of the dependent and neglected child; child-caring agencies, public and private; and a community program of child welfare. 3 s.h.
[Not offered in 1930-31]
213. Constructive Social Policies.-An intensive study of the theories and legislation dealing with such problems as compensation, vocational re-education, and other methods of social insurance and social improvement. 2 s.h.
[Not offered in 1930-31]
215. Rural Sociology.-A study of social conditions in rural communities and their improvement. Definite rural social problems are studied such as the drift to the cities, farming as an occupation, land problems, farm labor problems, coöperation, the rural school, the rural church, rural health and sanitation, the rural home, the social center. 3 s.h.
[Not offered in 1930-31]
216. Urban Sociology.-A study of the organization and social problems of urban communities, with special reference to social technology or the improvement of social and living conditions. The following subjects are treated: Municipal administration, city planning, housing, public health and sanitation, public safety, justice, welfare and leisure-time activities, and civic art. 3 s.h.
[Not offered in 1930-31]
217. General Anthropology.-A study of the origin and evolution of man as an animal and of the different races of mankind. The prehistoric human types, the principles of ethnology, and the characteristics of the Negro, Mongolian, American, and Caucasian races. Lectures and assigned reading. 3 s.h.
[Not offered in 1930-31]
218. Cultural Arthropology.-A study of social origins and of the earliest stages of cultural evolution; the stone and metal ages; the origins of industry, language, magic, religion, morals, science, art, and social organization in the family, horde, clan, and tribe. Lectures and assigned reading. 3 s.h.
[Not offered in 1930-31]
227. Emigration and Inmigration.-A study of territorial movements of population with especial reference to Europe and America. Causes and extent of migration; its effect upon American and European society; origin and characteristics of immigrant groups and their organization in the New World; problems, agencies and processes of assimilation. 2 s.h.
[Not offered in 1930-31]
219. Principles of Sociology.-A critical study of sociological theory. The sociological theories of recent writers will be critically examined with a view to laying the foundation for a constructive theory of the social life in modern biology and psychology. Discussions and papers by the class. First semester, T.Th.S. at 11. 3 s.h.

Professor Ellwood
220. History of Social Philosophy.-Lectures on the development of social thought from Aristotle to the present; the social philosophies of Plato, Aristotle, St. Augustine, Thomas Aquinas, Machiavelli, Bodin, Hobbes, Locke, Vico, Montesquieu, Rousseau, Condorcet, and the sociological systems of Comte, Spencer, Shaeffle, Lilienfeldt, Gumplowicz, Ratzenhofer, and Ward, will, among others, be considered. A large amount of assigned reading will be required in this course. The student is advised to correlate this course with related courses in economics, history, political science, and philosophy. Second semester, T.Th.S. at 11. 3 s.h.

Professor Ellwood
222. Mothods of Social Research.-A study of the various methods of research and investigation that can be applied to the study of social phenomena. Considerable time is given to the study of social statistics and the social survey. Special problems are assigned for research and field work. 3 s.h.
[Not offered in 1930-31]

## FOR GRADUATES

330. Seminar.-Research work upon special problems in sociology and social work. One hour session each week. 2 s.h.

Professor Ellwood

## THE SUMMER SCHOOL

The Duke University Summer School is divided into two terms of six weeks each. Many courses giving graduate credit are offered by members of the University Faculty and by visiting professors. A bulletin containing information regarding the graduate courses to be offered during the summer of 1930 may be obtained by addressing the Director of the Summer School, Duke University, Durham, N. C. Summer school graduate students who desire to be admitted as candidates for advanced degrees should make application to the Dean of the Graduate School and furnish official transcripts of the work done for the bachelor's degree. Such application may be made by correspondence, or in person during the first week of each summer term.

THE SCHOOL OF RELIGION

## THE SCHOOL OF RELIGION

## HISTORICAL STATEMENT

The present Duke University has been gradually developed from a simple beginning in a local school established in the northwestern part of Randolph County, North Carolina, in 1838. This school was enlarged in 1840 and named Union Institute. In 1841 it was incorporated as Union Institute Academy by the legislature of North Carolina. Under the leadership of President Braxton Craven, the academy grew into an institution chartered as Normal College in 1851. An amendment to the charter in November, 1852, authorized Normal College to grant degrees, and two students were graduated in 1853 with the degree of bachelor of arts.

In 1859 the charter of Normal College was amended to place the institution under the control of the Methodist Episcopal Church, South, and the name was changed to Trinity College. Dr. John Franklin Crowell became president of Trinity College in 1887. The most important achievement of his administration was the removal of the college to Durham, North Carolina, which was accomplished by September, 1892.

President Crowell resigned in 1894 and was succeeded by the Reverend John Carlisle Kilgo, D.D. During President Kilgo's administration the endowment of Trinity College was greatly increased, the Library and other important buildings were erected, and notable progress was made in increasing the variety and improving the quality of the courses of instruction. A School of Law was established in 1904 by the gift of Messrs. James B. and Benjamin N. Duke. In 1910 President Kilgo was succeeded by Dr. William Preston Few.

Trinity College has experienced a great expansion in faculty, endowment, buildings, and equipment during President Few's administration. In December, 1924, Mr. James B. Duke established a $\$ 40,000,000$ trust fund for educational and charitable purposes. Trinity College accepted the terms of the indenture of trust on December 29, 1924, and on the following day the name of the institution was changed to Duke University.

Mr. Duke's death in 1925 was followed by the announcement of munifieent provisions in his will for the development of the University which bears his family name.

## SCHOOL OF RELIGION

Trinity College was established by Christian men for the purpose of providing education for young men and women under distinctively Christian auspices. There has been no departure from this clearly defined aim. On the contrary there has been ever-increasing emphasis placed upon this feature of the work of the college, especially in the provision in the curriculum for a great variety of courses on the Bible and other religious subjects.

Through the gift of Mr. James B. Duke, the School of Religion and its curriculum have been separated from the work of the Department of Religion in Trinity College. Among those for whom his gift was intended Mr. Duke placed ministers first. He felt sure that his native state of North Carolina stood in need first of a better educated and more efficiently trained ministry. The organization of the School of Religion of Duke University, the first of the professional schools to start its work, is the carrying out of this intention on the part of Mr. Duke. The work of the School began with the academic year 1926-27, though the exercises formally opening the School were not held until November 9, 1926.

Duke University retains the same close relationship which Trinity College always held to the Conferences in North Carolina of the Methodist Episcopal Church, South. This legal relationship has always been broadly interpreted. Members of all other Christian denominations, as well as Methodists, will be made to feel welcome in the School of Religion and may be assured that the basis on which the work is conducted is broadly catholic and not narrowly denominational.

## THE PURPOSE OF THE SCHOOL OF RELIGION

Christian work has now expanded to the extent that it covers far more than the work of a preacher or minister. The School of Religion of Duke University purposes to offer training for all types of Christian service. This will include missionaries, teachers of Bible and other religious subjects in the
schools and colleges of the Church, directors of religious education, and social workers. In the future it is planned to fit the courses more completely to the needs of these workers. Still it must be kept clear that the minister in charge of a church, who is placed before the people to preach the Gospel of Christ, is the center and key to the whole problem of Christian work in the church. It is felt with strong conviction that the training of all Christian workers should be maintained on a high level. Consequently this School of Religion is organized on a strictly graduate basis. It is sincerely hoped that the standard thus set may increasingly influence the type of men and women entering Christian work and may lead them to demand the best of themselves in the prosecution of the work of Christ among men.

## RELATION OF THE SCHOOL OF RELIGION TO DUKE UNIVERSITY

As one of the coordinate schools of Duke University, the School of Religion is in closest touch with the other schools, particularly with Trinity College and with the Graduate School. Correspondence is invited from those who are interested in the possibility of securing degrees other than that of Bachelor of Divinity, which is granted upon recommendation of the faculty of the School of Religion. Seniors in Trinity College are admitted to certain courses in the School of Religion. Various privileges of Duke University are open to students of the School of Religion. Students in the School of Religion are expected to take part in the religious and social life of the University campus and to share in athletic interests and activities.

## REQUIREMENTS FOR ADMISSION

Candidates for matriculation must be graduates of colleges of recognized standing. They will be admitted without examination on presentation of an official transcript of all college credits and such other credits as they may have secured. This applies to students coming from foreign countries as well as to students from institutions in the United States. They must satisfy the faculty as to their Christian character and purpose. To this end a letter regarding a student's character and purpose from the pastor of his home church, a church official, or
some faculty member in the college where he did his undergraduate work, should be presented at the time of admission. Women will be admitted on the same conditions as men.

## ADMISSION TO ADVANCED STANDING

Students coming from colleges where departments of religion are maintained may be admitted to advanced courses in departments of the School of Religion in which they have done previous work as undergraduates. After one semester in residence, completing at least twelve semester-hours of work, students may make application to the faculty of the School of Religion for credit toward the Bachelor of Divinity degree for courses of senior-graduate rank taken as undergraduates.

## PART TIME SCHEDULES

Students who are not giving full time to their studies in the School of Religion may carry only limited schedules of class work.

## REQUIREMENTS FOR GRADUATION

The degree of Bachelor of Divinity will be conferred by Duke University on students in the School of Religion who satisfactorily complete the prescribed course of study, which consists of ninety semester-hours of work and a thesis. The course is planned to cover three years, of two semesters each, and students are urged to plan to spend in their theological studies the full time thus designated. In no case will the degree of Bachelor of Divinity be conferred on a student until he has spent at least two full semesters in residence in the School of Religion, and has satisfactorily completed a minimum of twentyfour semester-hours of work.

## THESIS

A thesis is required of all candidates for the degree of Bachelor of Divinity. It shall be of such a character as shall evidence a knowledge of the methods of research and an ability to conduct independent investigations. It shall be written upon some topic in the major field of study. The subject of the thesis must be approved by the professor in charge of the major field, and filed with the Dean of the School of Religion on or before November 1 of the academic year in which it is expected that
the degree will be conferred. The thesis shall be prepared under the supervision and guidance of the professor in charge of the major field. No student shall be allowed to write his thesis in absentia except on the approval of the dean and the professor in charge of the thesis. In all such cases regular reports as to the progress of the thesis must be made to the professor in charge.

The thesis shall be read by a committee of three members of the faculty of the School of Religion, one of whom shall be the professor under whose direction the thesis has been written, and two other members appointed by the dean, one of whom shall be of a department other than that in which the thesis is written. Each candidate shall be examined orally on his thesis by the committee appointed to read it, said examination not to exceed one hour in length. The thesis must be satisfactory to a majority of the members of the examining committee, including the representative of the department in which the thesis was written.

Three bound typewritten copies of the thesis must be submitted to the Dean of the School of Religion on or before May 15 of the year in which the degree is to be conferred. Theses submitted after that date shall not be considered as fulfilling the requirements for graduation in that academic year.

# REQUIREMENTS FOR THE DEGREE OF BACHELOR OF DIVINITY 

## GENERAL REQUIREMENTS

A candidate for the degree of Bachelor of Divinity must complete satisfactorily forty-five semester-hours of required work. These general requirements are divided among the departments of instruction in the following manner:

| Old Testament | 6 s.h. |
| :--- | ---: |
| New Testament | 9 s.h. |
| Christian Doctrine | 6 s.h. |
| Church History | 6 s.h. |
| Homiletics and Practical Theology | 6 s.h. |
| Religious Education | 6 s.h. |
| History of Religion and Missions | 6 s.h. |
|  | -45 |
| s.h. |  |

MAJOR ELECTIVES
Each student must select a major field in which he shall elect twelve semester-hours. This choice must be made by the end of the Middle year. A student may major in any of the departments of the School of Religion. He may also major in English Bible. To do this, he must complete in addition to the required work in the departments of Old Testament and New Testament nine semester-hours in the department of Old Testament and six semester-hours in the department of New Testament, exclusive of language.

## FREE ELECTIVES

Thirty-three semester-hours are designated as free electives. These are to be elected by the student, subject to the approval of the faculty.

## REQUIRED COURSES AND ELECTIVES BY DEPARTMENTS

OLD TESTAMENT
General requirement:
203-204. Introduction to the Old Testament

Major and free electives:
201-202. Introductory Hebrew 6 s.h.
301. Old Testament Theology 3 s.h.
302. The Exegesis of Selected Books of the Old Testament 3 s.h.

305-306. Pre-Mosaic Hebrew Religion 6 s.h.
307-308. The Old Testament in Hebrew 6 s.h.
309-310. Ancient Oriental History 6 s.h.

## NEW TESTAMENT

General requirement:
213-214. The Beginnings of Christianity 6 s.h.
311. The Life and Teachings of Jesus 3 s.h.

Major and free electives:
211-212. Hellenistic Greek 6 s.h
217. The New Testament in Greek 3 s.h.
218. The Exegesis of Selected Books of the New $\begin{aligned} & \text { Testament }\end{aligned}$
219. Life of Paul 3 s.h.
312. New Testament Theology 3 s.h.

313-314. The Exegesis of Selected Books of the New $\begin{aligned} & \text { Testament }\end{aligned}$
315. Judaism at the Beginning of the Christian Era 3 s.h.
316. Hellenistic Religions at the Beginning of the
Christian Era

## Christian doctrine

General requirement:
321. Introduction to the Science of Theology 3 s.h.
322. The Content of Christian Doctrine 3 s.h.

Major and free electives:
221. The Philosophy of Conduct 3 s.h.
222. Christian Ethics 3 s.h.

223-224. Idealism 6 s.h.
323. Theology in Ancient and Medieval Christianity 3 s.h.
324. Theology in Modern Christianity 3 s.h.
325. Soteriology 3 s.h.
326. Eschatology 3 s.h.

Additional courses for a major in this department are Old Testament 301 and New Testament 312.

## CHURCH HISTORY

General requirement:
233. Church History to the Reformation 3 s.h.
234. The History of the Evangelical Movement 3 s.h.

Major and free electives:
333. The Denominations in America: the Colonial Period 3 s.h.
334. The Denominations in America: the National Period 3 s.h.
335. Methodism 3 s.h.
336. Great Men of the Christian Church ..... 3 s.h.
337. Protestantism and Catholicism in Europe since 1800 ..... 3 s.h.
HOMILETICS AND PRACTICAL THEOLOGY
General requirement:
341. Homiletics, and either ..... 3 s.h.
342. Sermon Construction, or ..... 3 s.h.
343. Psychology of Preaching, or ..... 3 s.h.
344. History of Preaching, or ..... 3 s.h.
345. Pastoral Administration, or ..... 3 s.h.
346. Pastoral Administration ..... 3 s.h.
Major and free electives:
251. The Church and Rural Sociology ..... 3 s.h.
252. Rural Church Administration ..... 3 s.h.
255. Social Pathology ..... 3 s.h.
257. Principles of Sociology ..... 3 s.h.
342. Sermon Construction ..... 3 s.h.
343. Psychology of Preaching ..... 3 s.h.
344. History of Preaching ..... 3 s.h.
345-346. Pastoral Administration ..... 6 s.h.
348. Church Music and Religious Art ..... 3 s.h.
RELIGIOUS EDUCATION
General requirement:
261. Administration and Supervision of Religious Education ..... 3 s.h.
275. Introduction to the Psychology of Religion ..... 3 s.h.
Major and free electives.
262. Surveys, Tests, and Measurements ..... 3 s.h.
265. Curriculum of Religious Education ..... 3 s.h.
266. Religious Drama ..... 3 s.h.
267. Religious Education in the Community ..... 3 s.h.
268. Materials of Character Education ..... 3 s.h.
269. Principles and Program of Character Education ..... 3 s.h.
270. Religious Education in the Home ..... 3 s.h.
271. Research in Religious Education ..... 3 s.h.
272. Philosophy of Religious Education ..... 3 s.h.
273. Curriculum Construction ..... 3 s.h.
276. Advanced Psychology of Religion ..... 3 s.h.
371. The Religious Experience of the Child ..... 3 s.h.
372. The Religious Experience of Youth ..... 3 s.h.3 34.
HISTORY OF RELIGION AND MISSIONS
General requirement:
281. The Nature and Early Development of Religion, or ..... 3 s.h.
282. Living Religions of the World, and either ..... 3 s.h.
283. Expansion of Christianity, or ..... 3 s.h.
284. Principles of Missions ..... 3 s.h.
Major and free electives:
281. The Nature and Early Development of Religion 3 s.h.
282. Living Religions of the World 3 s.h.
283. Expansion of Christianity 3 s.h.
284. Principles of Missions 3 s.h.
381. Leading Ideas of Religion (God, Sin, and Salvation) 3 s.h.
382. Leading Ideas of Religion (Future Life and Ethics) 3 s.h.
383. Buddhism
3 s.h.
384. Mohammedanism 3 s.h.
385. Christianity and World Movements 3 s.h.
386. Missionary Problems 3 s.h.
DISTRIBUTION OF COURSES BY YEARS

Junior Year

| Old Testament | 6 s.h. |
| :--- | :--- |
| New Testament | 6 s.h. |
| Church History | 6 s.h. |

The remaining twelve semester-hours shall be chosen from courses in Greek, Hebrew, Homiletics and Practical Theology, Religious Education, History of Religion and Missions, but not more than six semester-hours shall be taken in one department.

## Middle Year

| New Testament | 3 s.h. |
| :--- | :--- |
| Christian Doctrine | 6 s.h. |

The remaining twenty-one semester-hours shall be chosen from courses in Greek, Hebrew, Homiletics and Practical Theology, Religious Education, History of Religion and Missions, major electives, free electives; but not more than twelve semes-
ter-hours shall be taken in one department.

21 s.h.
30 s.h.
Senior Year
In the Senior year the student must fulfill all general requirements not completed in the Junior and Middle years. The remainder of the work is elective.

# COURSES OF INSTRUCTION 


#### Abstract

OLD TESTAMENT Odd-numbered courses are offered in the first semester, even-numbered courses in the second semester.


201-202. Introductory Hebrew.-A study in the Hebrew language. The reading of the first eight chapters of Genesis inductively. 6 s.h.

Professor Godbey
203-204. Introduction to the Old Testament.-The origin, literary form, and contents of the books of the Old Testament in their historical setting. 6 s.h.

Professor Russell
301. Old Testament Theology.-The religious and ethical teachings of the books of the Old Testament in their historical development. Prerequisite, Old Testament 203-204. 3 s.h.

Professor Russell
302. The Exegesis of Selected Books of the Old Testament.-The books to be studied will be chosen from the following list: Job, Second Isaiah, Zechariah, the Psalms. The study will be based on the English text. 3 s.h.

Professor Russell
305-306. Pre-Mosaic Hebrew Religion.-Its historical portrayal in the Old Testament. Prolegomena to the study of Old Testament history and literature. No knowledge of Hebrew required. 6 s.h.

Professor Godbey
307-308. The Old Testament in Hebrew.-Parts of the Pentateuch are read during the first semester. Selections from the Prophets are the basis for the study in the second semester. 6 s.h. Professor Godbey

309-310. Ancient Oriental History.-The aim of this course is to show the relations of Minoan, Philistine, Ancient Egyptian, and Assyro-Babylonian history and literature to the Old Testament and to the early history of the Hebrews. 6 s.h.

Professor Godbey

## NEW TESTAMENT

211-212. Hellenistic Greek.-A course for students who wish to begin the study of the language of the New Testament. Selections from the New Testament will be read in the second semester. 6 s.h., provided the student takes New Testament 217-218 the following year.

Professor Branscomb
213-214. The Beginnings of Christianity.-A survey course dealing with the background, the beginnings, and the early history of Christianity. Special attention is given to the creation of the literature of the New Testament. 6 s.h.

Professor Branscomb
217. The New Testament in Greek.-Rapid reading in Greek text of the New Testament. Prerequisite, six semester-hours study of the Greek language. 3 s.h.

Professor Branscomb
218. The Exegesis of Selected Books of the New Testament.--The books studied will be Galatians, Colossians, and Hebrews. The course will be based on the Greek text. 3 s.h.

Professor Russell
219. Life of Paul.-A study of Paul's life on the basis of the Acts and the epistles. Consideration is given to Paul as a man, the factors entering into his character, and his permanent contribution to the world. 3 s.h. Professor Myers
[Not offered in 1930-31]
311. The Life and Teachings of Jesus.-Prerequisite, New Testament 213-214. 3 s.h.

Professor Branscomb
312. New Testament Theology.-The teaching of the books of the New Testament in their historical development. Prerequisite, New Testament 311. 3 s.h.

Professor Russell
313. The Exegesis of Selected Books of the New Testament.-The books studied will be I Corinthians, II Timothy, I Peter, and selections from the Apocalypse of John. The study will be based on the Greek text. Prerequisite, New Testament 217, or its equivalent. 3 s.h.

Professor Russell
314. The Exegesis of Selected Books of the New Testament.-The books studied will be Romans, James, and the First Epistle of John. The study will be based on the English text. Prerequisite, New Testament 213-214, or its equivalent. 3 s.h.

Professor Branscomb
315. Judaism at the Beginning of the Christian Era.-A study of Judaism from the time of Ben Sirach to the writing of the Mishna. Prerequisite, New Testament 213-214, or its equivalent. 3 s.h.

Professor Branscomb
[Not offered in 1930-31]
316. Hellenistic Religions at the Beginning of the Christian Era.-Prerequisite, New Testament 213-214. 3 s.h. Professor Russell
[Not offered in 1930-31]

## CHRISTIAN DOCTRINE

221. The Philosophy of Conduct.-See Philosophy 203, p. 88 of the catalogue of Undergraduate Instruction. 3 s.h. Professor Cranford
222. Christian Ethics.-See Philosophy 204, p. 88 of the catalogue of Undergraduate Instruction. 3 s.h.

Professor Cranford
223-224. Idealism.-See Philosophy 205-206, p. 88 of the catalogue of Undergraduate Instruction. 6 s.h. Professor Cranford
321. Introduction to the Science of Theology.-A consideration of theology as a branch of science and an indication of some of the results obtained through the use of the scientific method in theological investigation. 3 s.h.

Professor Rowe
322. The Content of Christian Doctrine.-A comprehensive survey of the leading doctrines of Christianity in the light of the religious thought and experience of the present age. 3 s.h. Professor Rowe
322. Theology in Ancient and Medieval Christianity.-The history of Christian thought from the Greek Fathers to the Scholastics with special attention to the ecumenical creeds. 3 s.h.

Professor Rowe
224. Theology in Modern Christianity.-The history of Christian thought from the beginning of the Reformation to the present time. 3 s.h.

Professor Rowe
325. Soteriology.-A study of the Christian doctrine of salvation and a comparison of the various ways by which the saving power of God is thought to take effect in personal and social life. 3 s.h.

Professor Rowe
[Not offered in 1930-31]
326. Eschatology.-A study of "the last things" in the light of the Christian hope for the individual and for society with special emphasis upon personal immortality. 3 s.h.

Professor Rowe
[Not offered in 1930-31]

## CHURCH HISTORY

233. Church History to the Reformation.-A survey of the growth of the Christian Church from the Apostolic Age to the Reformation. 3 s.h.

Professor Garber
234. History of the Evangelical Movement.-Beginning with the Lutheran Reformation, this course traces the rise, growth, influence, and history to 1800 of the Calvinistic, Anglican, Reformed, Quaker, Baptist, and Methodist movements. 3 s.h.

Professor Garber
333. The Denominations in America: the Colonial Period.-A study of the transfer of the various denominations to the English colonies, and their problems to the Revolutionary War. Prerequisite, Church History 233234. 3 s.h.

Professor Garber
334. The Denominations in America: the National Period.-Major emphasis is placed upon relations of church and state, steps toward Christian unity, the small sects, the Young People's Movement, Christian education, and modern theological issues. Prerequisite, Church History 233-234. 3 s.h.

Professor Garber
335. Methodism.-A study of the beginnings and growth of the Methodist societies in England, of early Methodism in America, and of the
development of the several branches of the Methodist Church in America. Prerequisite, Church History 233-234. 3 s.h. Professor Garber
336. Great Men of the Christian Church.-A study of outstanding individuals who have in different ways influenced the thought and program of the Christian Church. The life, work, and contributions of about twenty representative Christian leaders. Prerequisite, Church History 233-234. 3 s.h.

Professor Garber
337. Protestantism and Catholicism in Europe since 1800 .-A comprehensive study of the religious situation in Europe in modern times, emphasizing the papacy in the age of nationalism, relations of church and state, German theology of the nineteenth century, and the Oxford movement. Prerequisite, Church History 233-234. 3 s.h.

Professor Garber
[Not offered in 1930-31]

## HOMILETICS AND PRACTICAL THEOLOGY

251. The Church and Rural Sociology.-A study of the religious, social, educational, and economic conditions of the country; the historical development of the church in the midst of rural social relations; an attempt to discover the present obligation of the church. $\mathbf{3}$ s.h.

Professor Ormond
252. Rural Church Administration.-This course will deal with the functions of the rural church; the minister's attitude toward rural life, his mission to the rural people, as well as his service in managing the organization of and supervising the church program. 3 s.h.

Professor Ormond
255. Social Pathology.-See Sociology 205, p. 100 of the catalogue of Undergraduate Instruction. 3 s.h. Professor Ellwood
257. Principles of Sociology.-See the forthcoming catalogue of the Graduate School of Arts and Sciences. 3 s.h. Professor Ellwood
341. Homiletics.-An introduction to the theory and practice of preaching. Practical problems in preaching are investigated, to determine the causes of success and failure. Opportunity for practice preaching will be afforded. 3 s.h.

Professor Hickman
342. Sermon Construction.-A study of problems in sermon construction and points of psychological contact between the preacher and his congregation. The class work will involve a critical analysis of selected sermons, with written reports. 3 s.h. Professor Hickman
343. Psychology of Preaching.-A psychological study of the preaching motive, the relation of the preacher to his congregation, and the relation of the preacher to society in general. 3 s.h. Professor Hickman
[Not offered in 1930-31]
344. History of Preaching.-An historical study of the development of Christian preaching from the apostolic period to the present time. Emphasis is laid upon the personality and the homiletical methods of great preachers, studied in their true historical perspective. 3 s.h.

Professor Hickman
[Not offered in 1930-31]
345-346. Pastoral Administration.-A survey of the duties, relationships, and opportunities of the pastorate, and of the organization and management of a parish; the conduct of public worship; methods of dealing with problems; projects in local churches. 6 s.h.

Professor Stanbury
348. Church Music and Religious Art.-A study of the use of music and art in public worship. 3 s.h. Mr. Barnes et al.

## RELIGIOUS EDUCATION

261. Administration and Supervision of Religious Education.-Deals with problems of administering and supervising the religious education program of the local church. Designed especially to train ministers and other administrative leaders in religious education. Methods of correlation and integration are considered. 3 s.h.

Mr. Little
262. Surveys, Tests, and Measurements.-Study of the methods of getting the facts in religious education. Consideration of underlying principles, techniques, and available materials. Special attention to procedure in a local church. 3 s.h.

Professor
265. Curriculum of Religious Education.-Study of various theories of the curriculum of religious education; conception of the curriculum as enriched and controlled experience. Analysis of existing curricula and critical evaluation of same. 3 s.h.

Professor Spence
[Not offered in 1930-31]
266. Religious Drama.-Study and analysis of the best religious drama available. Project work in the writing and production of religious drama and pageants. 3 s.h.

Professor Spence
[Not offered in 1930-31]
267. Religious Education in the Community.-This course considers the latger relations of religious education to public education and other community agencies, and also the need, organization, program, and types of week-day religious education and the vacation church school. 3 s.h.

Professor Spence
268. Materials of Character Education.-A study of the Bible and other great religious literature for their contributions to character formation at each given stage of character development. Special emphasis on story material and modern religious poetry. 3 s.h. $\quad$ Professor Spence
269. Principles and Program of Character Education.-Theory and methods of character education. Study of experiments made in this field.

While primary consideration is given character building in religious education, the development of character education in the public schools will also be carefully surveyed. 3 s.h.

Mr. Little
270. Religious Education in the Home.-Deals with special problems in connection with making the home an effective religious educational agency. Study of family relationships, worship habits, attitudes, and ideals. Coöperation of the home with other agencies in the moral and religious development of the child. 3 s.h.

Professor
271. Research in Religious Education.-For advanced students and especially those majoring in religious edication. Offers direction in the use of various techniques and methods for both field and library investigations. (All professors in the department are available for special counsel.) 3 s.h.

Professor
272. Philosophy of Religious Education.-For advanced students interested in problens growing out of the philosophical implications of religious education. Critical examination of various theories and principles underlying modern procedure in religious education. Prerequisite, Religious Education 261. 3. s.h.

Professor -
273. Curriculum Construction.-This course deals with the processes of research, construction, and experimentation used in curriculum making. Actual curriculum construction will be undertaken. $\mathbf{3}$ s.h.

Professor Spence
[Not offered in 1930-31]
275. Introduction to the Psychology of Religion.-Study of the major factors of religious experience, together with conditions bearing upon its genesis and growth. 3 s.h.

Professor Hickman
276. Advanced Psychology of Religion.-Psychological study of such problems as worship, prayer, and various types of belief. Some attention to special problems. Prerequisite, Religious Education 275 or its equivalent. 3 s.h.

Professor Hickman
371. The Religious Experience of the Child.-A psychological study of the developing religious experience of childhood, involving a consideration of the principles of genetic psychology. Prerequisite, one course in general psychology. 3 s.h.

Professor Hickman
372. The Religious Experience of Youth.-A continuation of Religious Education 371. Prerequisite, one course in general psychology. 3 s.h.

Professor Hickman
373. The Psychology of Mysticism.-A brief historical review of the principal phases of mysticism in religion, followed by a psychological analysis to estimate the abiding worth of mysticism in religious experience. Prerequisite, Religious Education 275 or equivalent. 3 s.h.

Professor Hickman
[Not offered in 1930-31]

## HISTORY OF RELIGION AND MISSIONS

281. The Nature and Early Development of Religion.-Introduction to the early history of religion, the beliefs and practices of the more primitive peoples, and the religious life of the ancient world. 3 s.h.

Professor Cannon
282. Living Religions of the World.-A survey of the religious systems of India, China, and Japan, followed by a study of Judaism, Mohammedanism, and Christianity, the object being to trace the historical development of each religion. 3 s.h.

Professor Cannon
283. Expansion of Christianity.-Apostolic missions, conquest of the Roman Empire, winning of northern Europe, the modern missionary era, status of missionary work in important areas, social aspects of missions, missionary biography. 3 s.h.

Professor Cannon
284. Principles of Missions.-The great missionary agencies, their foundation and growth; creation and cultivation of the missionary spirit at the home base; training and work of the pastor; principles and practice of missionary education; organization of the local congregation for its missionary tasks. 3 s.h.

Professor Cannon
381. Leading Ideas of Religion.-The idea of God and the doctrine of $\sin$ and salvation in the religions of the world. Prerequisite, History of Religion and Missions 281 or 282. 3 s.h.

Professor Cannon
382. Leading Ideas of Religion.-The conception of the future life and ethical ideals and practice in the religions of the world. Prerequisite, History of Religion and Missions 281 or 282. 3 s.h.

Professor Cannon
383. Buddhism.-India at the rise of Buddhism. Life of the Buddha and the teachings of early Buddhism. Development into the Hinayana and Mahayana schools, its spread and present condition in southern and eastern Asia. Prerequisite, History of Religion and Missions 282. 3 s.h.

Professor Cannon
[Not offered in 1930-31]
384. Mohammedanism.-The life of Mohammed and the religion of Islam, special attention being given to the Koran and its teaching. The aim is to interpret Mohammedanism as a force today. Prerequisite, History of Religion and Missions 282. 3 s.b.
[Not offered in 1930-31]
385. Christianity and World Movements.-Relation of Christianity to significant world movements,-race, war, industry, world peace. 3 s.h.

Professor Cannon
[Not offered in 1930-31]
386. Missionary Problems.-Needs of particular fields, types of work, relations of older and younger churches, nationalist movements, qualification and training of candidates, education and other selected problems. Prerequisite, History of Religion and Missions 283 or 284.3 s.h.

Professor Cannon
[Not offered in 1930-31]

## GENERAL INFORMATION

## REGULATIONS FOR THE DEGREE OF MASTER OF ARTS IN RELIGION

By joint action of the Graduate Council and of the faculty of the School of Religion, the following regulations have been established for the granting of the degree of Master of Arts in the field of religion:

A student desiring to obtain an A.M. degree with religion as the principal field of work must first complete a period of one academic year in residence in the School of Religion, or in an approved school of similar standing, and must secure thirty semester-hours of credit in studies approved by the faculty of the School of Religion. He may then be recommended to the Graduate Council by the faculty of the School of Religion as a suitable candidate for the A.M. degree. Only those students who have maintained a creditable standing in the first year's work of the School of Religion will be recommended for admission to candidacy for the A.M. degree.

The student, in the next year following the completion of the preliminary requirement in the School of Religion, shall take twelve se-mester-hours of work and write a thesis for the A.M. degree in some department of the School of Religion in which he has previously received six semester-hours credit for resident work.* In addition, the student shall take twelve semester-hours of work in related departments of the School of Religion, or in related departments offering graduate courses in the other schools of the University. The student's selection of courses shall be approved by the Faculty of the School of Religion and by the Graduate Council.

In all other respects the candidate for the A.M. degree in the field of Religion shall conform to the usual regulations of the Graduate Council, such as the approval by the Graduate Council of all courses in the School of Religion for which graduate credit is asked, the prerequisites in foreign language, the examination of the thesis, etc.

Students who are recommended to the Graduate Council by the faculty of the School of Religion as candidates for the A.M. degree under the above plan shall be registered for the following year in the Graduate School of the University. They may also be registered in duplicate in the School of Religion for such part of the year's work as will be accepted by the faculty of the School of Religion toward the degree of Bachelor of Divinity.

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## FEES

Room-rent and tuition are remitted to students matriculated in the School of Religion, for which they are expected to render service from time to time which shall not interfere with their work in the School of Religion.

Each student is assessed per semester as follows:
Matriculation fee ..... $\$ 25.00$
Athletic fee (optional) ..... 5.00
Publication fee (optional) ..... 2.50
Damage fee ..... 1.00

Each student is assessed in the last semester before a degree is conferred, a commencement fee of three dollars and a diploma fee of five dollars. The latter fee is refunded if the diploma is not awarded.

## LATE REGISTRATION

Students matriculating in either semester at a date later than that prescribed in the catalogue shall pay to the treasurer of the University a penalty of five dollars.

## ROOMS

Men students in the School of Religion are housed in the new dormitories on the west campus of Duke University. All rooms are provided with heat, water, and electric light. Each student furnishes his own blankets, sheets, pillow-slips, towels, and pillows. Students must furnish their own electric lamps, which can be purchased from the University store.

Rooms for a given year may be engaged at the treasurer's office at any time before May 15 of the preceding year. Every student who wishes to retain his room for the succeeding year must notify the treasurer's office on or before May 15. All rooms which have not been signed for on or before May 15 will be considered vacant for the succeeding year. A reservation is canceled, and the University is free to rent the room to other students, unless a deposit of $\$ 5.00$ for each proposed occupant, in part payment of the rent, is made by August 1. When a room is once engaged by a student, no change will be permitted except with the consent of the treasurer.

## BOARDING HALLS

The University dining hall in the College Union has accommodations for all the resident men students. It is the policy of the University to furnish board to the students at actual cost. Board may be secured at the Union for $\$ 25.00$ per month of twenty-eight days. The College Union is the logical center of student activities and all male students are advised to board in its supervised halls.

## STUDENT AID

Scholarships are available for ministerial students, the terms of which may be ascertained by correspondence with the Registrar of the School of Religion. Aid is also given in securing positions in churches. Students who need financial help may be assured that the administration will do all in its power to give the necessary assistance.

## LIBRARY

The library of Duke University is at the disposal of students of the School of Religion. This library contains many volumes of great value for the work of the School of Religion. Additions are being made constantly. Beginning with the academic year 1930-31 the School of Religion will be housed on the west campus in its new building which will contain a special library and reading room. This building is located next to the University library, thus offering quick access to what will become in time one of the great university libraries in America.

Recently two private libraries of note have been secured. One is the library of the late Dr. Graf von Baudissin, Professor of the Old Testament in Berlin University. The other is that of the late Dr. Karl Holl, Professor of Church History in the same university. These libraries, consisting of over five thousand volumes, are the fruit of long years of literary interest and activity on the part of these learned men.

## RELIGIOUS LIFE

The students of the School of Religion are expected to attend the regular Trinity College chapel services the first five days of the week. A special chapel service for the School of Religion is held each Saturday morning.

In this, as in other features of the University life, the students of the School of Religion are urged to identify themselves with the life of the whole student group.

## DATE OF REGISTRATION

Class work in the School of Religion for the academic session of 1930-1931 will begin Monday, September 29, 1930. The registration of students in the School of Religion will begin on Friday, September 26, 1930. Registration should be completed by Saturday, September 27, 1930.

## ADDITIONAL INFORMATION

Requests for information not contained in this catalogue should be addressed to the Registrar of the School of Religion, Duke University, Durham, North Carolina.

# JUNALUSKA SCHOOL OF RELIGION 

INSTRUCTORS<br>Elbert RUSSELL, A.B., A.M., Ph.D.<br>Dean of the School of Religion and Professor of Biblical Interpretation Duke University<br>WILLIAM CLAYTON BOWER, A.M. Professor of Religious Education The University of Chicago<br>BENNETT HARVIE BRANSCOMB, A.B., B.A., M.A. (Oxon) Professor of New Testament Duke University SYLVANUS MILNE DUVALL, A.B., Ph.D.<br>Professor of Religious Education Scarritt College<br>FRANKLIN SIMPSON HICKMAN, A.B., A.M., S.T.B., Ph.D. Professor of the Psychology of Religion and Homiletics Duke University<br>SAMUEL GUY INMAN, A.B., A.M., LL.D.,<br>Executive Secretary, Committee on Coöperation in Latin America New York<br>GILBERT THEODORE ROWE, A.B., D.D., Litt.D.<br>Professor of Christian Doctrine<br>Duke University

## CALENDAR: SCOPE OF WORK

The third session of the Junaluska School of Religion will be held at Lake Junaluska, North Carolina, from July 21 to August 30, 1930. It will be conducted under the joint management of Duke University and the General Sunday School Board with the coöperation of the Board of Missions and other boards of the Church. The purpose is to conduct a summer
school of religion which shall meet the growing demand for advanced study in the Bible, Theology, Religious Education, Missions, and allied subjects.

There will be two classes of students, those who are graduates of high schools and who may have had one or more years in college, and those who are graduates of colleges. The school is open to men and women. The credits secured for work done will be Duke University credits, and will count toward the A.B. and B.D. degrees and for the A.M. degree in the School of Religion.

The School is designed for pastors, church workers, missionaries, and students who desire to fit themselves the better for their work or to add credits looking toward the securing of university degrees.

## COURSES

Courses will be offered meeting five times a week with eighty-minute periods. Each course, satisfactorily completed, will receive a credit of three semester-hours in Duke University. Two such courses may be taken by each student. The courses offered are divided into two groups. The first group consists of courses for college undergraduates who are graduates of high schools and who desire credits looking toward the A.B. degree. The second group consists of courses for college graduates who desire credits looking toward the B.D. degree. These courses may also be taken by college undergraduates who have completed the junior year and are ranked as incoming seniors in college.

## GROUP I

## FOR COLLEGE UNDERGRADUATES

Course 1. The Teachings of Jesus.-A study of Jesus' teaching in the light of the religious and ethical ideas of his day.

Professor Branscomb
Course 3. Old Testament History.-A survey of the history of the Hebrews in its relation to contemporary oriental history, with special emphasis on the literature and religious institutions. Professor Russeml

Course 5. The Evangelical Movement as a Factor in Social Reconstruction in Latin America.-Survey of present social and religious conditions, the church and the community, religious education program, literature problem, relations between national and foreign workers and between Protestants and Catholics, movements for coöperation and unity.

Professor Inman

## GROUP II

> FOR COLLEGE GRADUATES
> (AND FOR COLLEGE SENIORS)

Course 2. The Religious Ideas of Paul.-Religious and ethical teachings of the Apostle Paul and their significance for the life of today. Special attention is given to the religious and philosophic movements of Paul's day.

Professor Branscomb
Course 4. The Social Teachings of the Old Testament.-A survey of the social teachings of the Old Testament, with special reference to their value in modern life.

Professor Russell
Course 6. Religious Education in the Modern Church.-The educational function of the church; the objectives of religious education; the church organized for religious education; an adequate leadership; the content and method of religious education; religious education through social participation; the scientific method in religious education; religious education in its relationship to the total educational process; religious education and public education; religious education as a creative process.

Professor Bower
Course 8. Practicum in Religious Education.-The analysis of problems in teaching religion. The course will be based upon the practical experience of the members of the group in the actual conduct of religious education. The process as conducted will be analyzed and criticized. Changes in the direction of improvement will be projected in terms of practical steps to be undertaken. Each student is expected to undertake a specific project.

Professor Bower
Course 10. Educational Psychology.-Consideration will be given to the psychological basis of conduct; the nature of motive; the nature and laws of learning and especially to those phases of psychology which are of greatest significance for character formation and spiritual growth.

Professor Duvall
Course 12. Introduction to the Science of Theology.-A consideration of theology as a branch of science and an indication of some of the results obtained through the use of the scientific method in theological investigation.

Professor Rowe
Course 14. Introduction to the Psychology of Religion.-Study of the major factors of religious experience, together with the conditions bearing upon its genesis and growth.

Professor Hickman
Course 16. Sermon Construction.-A study of problems in sermon construction and points of psychological contact between the preacher and his congregation. The class work will involve a critical analysis of selected sermons with written reports.

Professor Hickman

Course 18. Christianity and World Movements.-A survey of present world movements building a better world: international political organization, including the League of Nations, World Court, Pan American Union, international law, arbitration; international social, labor, health and student movements; international missionary program, recent conferences at Jerusalem and Havana, relations between younger and older churches, opportunities for foreign service. Professor Inman

## ADDITIONAL INFORMATION

A general matriculation fee of $\$ 5.00$ is due at time of registration and a special fee of $\$ 5.00$ in each course for which the student registers.

Students are of course responsible for their own arrangements for board and room. Those desiring to engage room and board in the Sunday School Dormitory should write A. L. Dietrich, 810 Broadway, Nashville, Tennessee. Those desiring to room elsewhere should write to Ralph E. Nollner, Lake Junaluska, North Carolina.

All the sessions of the school will be held in the Sunday School Building at the west end of Lake Junaluska.

Academic matters will be in charge of the faculty of the School of Religion, Elbert Russell, Dean.

Those desiring further information concerning courses and conditions of work should address John Q. Schisler, General Sunday School Board, 810 Broadway, Nashville, Tennessee, or Paul N. Garber, Registrar, School of Religion, Duke University, Durham, North Carolina.

THE SCHOOL OF LAW

## THE SCHOOL OF LAW

## FOUNDATION

The School of Law was founded in the summer of 1904 upon an endowment established by Messrs. James B. Duke and Benjamin N. Duke. It aims to prepare students for the profession of the law in the several states; to awaken in students of law faith in and an admiration for the profession; to develop in them a lively sense of honor and justice, and to fit them in moral character for the duties which belong to this ancient and noble profession.

## LAw SCHOOL BUILDING

The building especially designed to house the Duke University School of Law will be occupied for the first time in September, 1930.

The Law Building, like all other structures on the main campus of Duke University, is in Tudor Gothic style of colorful Cambrian stone from the Duke University quarries.

This building is planned to take care of all the various activities of the modern school of law, and in it are to be found five large classrooms with a seating capacity of approximately two hundred each, five classrooms with a seating capacity varying from fifty to seventy-five each, seminar rooms, law-club rooms, offices for the staff, quarters for a legal clinic and for special research, a court-room equipped for both supreme and superior court sessions, two large library readingrooms, and extensive stack-room space; since the stack-rooms of this building are directly connected with the central Library of the University, there is therefore a possibility of indefinite expansion to take care of an unlimited number of volumes in the library of the School of Law.

## CALENDAR

The academic year will begin Wednesday, September 24, 1930, and will end on June 10, 1931. There will be a recess from December 22, 1930, to January 3, 1931. The lectures will
begin on the opening day of the year, Wednesday, September 24, 1930.

## ADMISSION OF STUDENTS

No student will be admitted to the study of law who has not completed, with class standing satisfactory to the faculty, work equivalent to one-half of that acceptable for a bachelor's degree in the undergraduate department of Duke University, or of some other college or university of approved standing. Such work must have been completed with an average grade of not less than five per cent higher than the passing grade of the institution from which credits are offered, or a "C" average if the applicant presents credits from an institution recognizing "D" as a passing grade.

Commencing with the academic year 1931-32 the minimum requirement for admission will be the completion of work equivalent to three-fourths of that acceptable for a bachelor's degree in the undergraduate department of Duke University, or of some other college or university of approved standing.

Any person, who has prior to the commencement of his law study complied with the requirements of the preceding paragraphs, who shall present evidence of the satisfactory completion of any part of the curriculum of the law school at any approved law school maintaining courses of instruction of at least thirty-two weeks for each academic year, and who is eligible for readmission to the law school from which he proposes to transfer, may be admitted to advanced standing and given provisional credit for courses so completed, final credit for such work to be conditioned on the satisfactory completion of courses carried in the Duke University School of Law.

Wherever possible a personal interview is required of the applicant by a representative of the University. In all cases where a personal interview is not practicable letters from public officials, school officials, or other responsible persons, certifying to the applicant's moral character, capacity for leadership, and probable success in the practice of law, are required.

Each applicant for regular or advanced standing is required to accompany his application with a recently made personal photograph, and to have submitted from the recording official of the institution from which he offers credits a complete transcript of his record and a statement of honorable dismissal.

## DEGREE

The successful completion of three years' study of law, at least one year of which must have been in residence at Duke University, together with the favorable recommendation of the faculty, is required for the degree of Bachelor of Laws.

## FEES AND EXPENSES

Tuition and registration fees are due at the beginning of each semester. The tuition fee is $\$ 75.00$ a semester. The matriculation fee is $\$ 25.00$ a semester. A damage fee of $\$ 1.00$ a year is collected at the beginning of the first semester and a medical fee of $\$ 2.00$ per semester at the beginning of each semester. The library and the athletic fees are $\$ 5.00$ each per semester. The graduation fee, payable by all students to whom a degree is awarded, is $\$ 10.00$. All fees are payable to the treasurer of the University.

Board can be secured at $\$ 25.00$ per month at the Union. Furnished rooms may be secured in the dormitories of the University at from $\$ 50.00$ to $\$ 75.00$ per semester. These prices include light, heat, water, and janitor service.

## MATRICULATION, REGISTRATION, AND ENROLLMENT

All students must appear before the Committee on Admission and obtain cards for admission or examination. Cards of admission must be presented at the treasurer's office at the time of matriculation. All students, both old and new, are required to matriculate at the beginning of each semester and to obtain from the treasurer a certificate of matriculation which serves also as an enrollment card. Students matriculating in either semester at a date later than that prescribed in this catalogue shall pay to the treasurer a penalty of five dollars for late registration. Students whose course-cards have been approved in the spring are given an opportunity during the summer to matriculate by mail for the first semester in the fall. No student is admitted to any class without a matriculation card.

## PRIVILEGES

Students are entitled, by virtue of having paid the athletic fee, to the use of the gymnasium, tennis courts, swimming pool,
and similar privileges of the University without additional costs or fees, together with free admission to all athletic contests held on home grounds.

## CONDUCT OF STUDENTS

The University expects of its students loyal and hearty cooperation in developing and maintaining high standards of conduct as well as of scholarship. The University therefore reserves the right, and matriculation by the student is a concession of this right, to ask the withdrawal of any student whose conduct at any time is not satisfactory to the University, even though no specific charge be made against the student.

## OUTLINE OF WORK

The full course of law occupies three academic years. The program of study comprises the following subjects:

FIRST YEAR'S WORK

1. Contracts.-A study of the principles of contracts, including the following: Requisites of contracts; offer, acceptance, and revocations; contracts under seal; history and effect of Statute of Frauds; consideration; capacity of parties; legality of object; the effect of fraud and mistake. Three hours a week each semester.

Bolich
2. Property I.-The distinction between real and personal property; consideration of special kinds of chattels, personal and chattels real; origin of title, original acquisition, accession, occupancy, creation and transfer by operation of law, by act of parties, including gifts, inter vivos, causa mortis, conditional.

Introduction to the law of real property, principles of the feudal system, development of real property law as affected by custom, statutes, judicial construction, influence of equity, and modern legislation; estates in real property. Three hours a week each semester. Kirkwood
3. Torts.-Torts distinguished from other wrongs; proximate cause; parties responsible; joint wrong doers; wrongs affecting personal property; defamation; injuries to family rights; action for wrongful death; wrongs in respect to civil and political rights; trespass; water; conversion; injuries to incorporeal rights; violations of official duty; deceit; master and servant; nuisances; non-performance of conventional and statutory duties; negligence. Three hours a week each semester.

## Maggs

4. Criminal Law.-The nature and classification of crimes; the mental element in crimes; persons capable of committing crime and exemption from responsibility; sufficiency of the act; specific offenses. Two hours a week each semester.

Miller
5. Agency.-Nature of the relation; who may be (a) principal, (b) agent; rights and liabilities of principal and agent; ratification and estoppel ; undisclosed principals, termination of the relation; nature and extent of the authority and of its construction and execution; special classes of agents. Two hours a week second semester.

Horack
6. Common Law Courts and Actions.-The origin and development of the common law courts and the formulary system of actions together with a detailed study, by the case method, of the various common law actions and the principles of common law pleading. Two hours a week first semester.
7. Legal Ethics.-The study of legal ethics is confined to a consideration of adjudicated cases, the canons of ethics of both the American Bar Association and the Boston Bar Association, together with decisions by committees of lawyers of different bar associations throughout the United States, and the observations of moralists. One hour a week second semester.

Bryson
8. Legal Bibliography.-The history and development of reporting of cases in England and America. Codes, statutes, and session laws; the use of tables of cases, parallel citation tables; arrangement of books in a law library. One hour a week first semester.

Bolich
9. Researching and Briefing.-The analysis of cases; use of digests, encyclopedias, selected cases; indexes to reports and Law Reviews. Trial and appellate court briefs. One hour a week second semester.

Bolich

## SECOND YEAR'S WORK

10. Equity.-Development and nature of equity jurisdiction; principles governing the exercise of equitable powers; specific performance, reformation, and rescission of contracts; benefits conferred under agreements which have been wholly or partially performed, and under compulsion and undue influence; benefits obtained by the wrongful use of another's property. Three hours a week each semester.

Horack
11. Evidence-Circumstantial, testimonial, and real evidence; rules as to number of kinds of witnesses; authentication and production of documents; the hearsay rules; rules of exclusion; parol evidence rules; burdens of proof; judicial notice; reformed rules. Two hours a week each semester.
12. Negotiable lnstruments.-Negotiable promissory notes and bills of exchange, their origin, history, and development ; the requisites of negotiability, the rights and liabilities of parties, the effect of endorsement and transfer; presentment, dishonor, and protest; the defenses which may be interposed. Two hours a week each semester. Towe
13. Property II.-Titles to real property; possessory titles, derivative titles at common law, under statute of uses, and under modern statutes, transfer of titles inter vivos; covenants for title; estoppel by deed; priorities.

Wills.-The form of wills; testator's capacity; perpetuities; mistake; fraud and undue influence; revocation and republication of wills; probate and construction of wills; legacies, claims, and the doctrine of election. Three hours a week each semester.

Kirkwood
14. Sales.-Sales of personal property; essential elements of a sale; subject matter of sale; actual and potential existence; statute of frauds; conditions and warranties; segregation and identification; remedies of vendor; remedies of vendee. Two hours a week each semester.

Spears
15. Code Pleading.-A complete review of remedial law as applied in code jurisdiction with special reference to North Carolina. The form, theory, and classification of civil actions and special proceedings. A complete analysis of all pleadings available in such actions and proceedings; trial. Two hours a week each semester.

Bryson
16. Criminal Procedure.-A survey of the principles of criminal procedure as applied in the American courts. The leading proposals in the current movement for reform. Two hours a week first semester.

Bryson
third year's work
17. Corporations.-The nature of a corporation; its creation and citizenship; the effect of irregularity in its creation; the relationship between the corporation and its promoters; the powers and liabilities of corporations; the relationship between the corporation and the state; membership; management; dissolution; rights and remedies of creditors. Two hours a week each semester.

Towe
18. Constitutional Law.-Making and changing constitutions; separation and delegation of powers of government; function of judiciary in enforcing; political rights; personal and religious liberty; protection of persons accused of crime; due process and equal protection of law; police power ; eminent domain; retroactive civil laws; Indians and aliens; territories, dependencies, and new states. Two hours a week each semester.

Maggs
19. Trusts.-Distinctions between trusts and various other relationships; the creation of trusts; the nature of the interest of the cestui que trust ; the duties of the trustee; constructive and resulting trusts; termination of trusts. Two hours a week each semester. Horack
20. Securities.-Essential elements of legal and equitable mortgages; rights of mortgagor and mortgagee at law and equity; title; possession; dower; courtesy; waste; priorities; collateral agreements; forfeiture; redemption, extension, assignment, and discharge of mortgages; chattel mortgages; pledges; trust deeds, and other form of liens and encumbrances. Two hours a week each semester.

Bolich
21. Office, Trial and Appellate Practice.-Open to members of the senior class. Lectures and exercises relating to the practical work of a lawyer; drafting of instruments; preparing of pleadings and trial briefs; the various trial methods and the steps taken in the trial of a case; perfecting an appeal; the appeal brief; procedure in the Supreme Court. Three hours a week each semester.

Bryson
22. Conflicts.-The rules determining the rights of parties in private law, where at least one of the operative facts in the case is connected with some other state or country than the one in which suit is brought. The principal problems arising in the law of obligations, property, inheritance, and family law; in the administration of estates; and in the enforcement of foreign judgments. Two hours a week each semester.
23. Domestic Relations.-Relation of husband and wife, parent and child, guardian and ward; marriage, its duties and obligations; annulment, divorce, and maintenance including a study of the personal and property rights of the parties. Two hours a week each semester.

Spears
24. Partnership.-Requisite; nature of the relation as between the (a) partners, (b) third persons; what is required as to form; authority of partners; actions by and between partners; accounting and dissolution; Limited Partnership; the so-called "Common Law Company." Two hours a week each semester. Towe

The subjects as outlined for the first year are all required. Electives are available to second and third year students with the approval of the faculty of the Law School.

## LIBRARY

In addition to the extensive resources of the general library the Law Library consists of approximately 12,500 volumes.

## METHOD OF INSTRUC̣TION

The case-book method is employed as the basis of instruction.

## MORDECAI LAW SOCIETY

This organization of the law students was established in 1927 in memory of the late Dean Samuel Fox Mordecai.

All students of the Law School are participating members of this society, which, with the advice and coöperation of the faculty, seeks to foster legal attainment. Its program at meetings includes the holding of moot courts, the reading of papers on topics of the law, the discussion of recent cases of importance, and addresses by prominent lawyers.

## THE SCHOOL OF MEDICINE

## THE SCHOOL OF MEDICINE

## GENERAL STATEMENT

The Duke University School of Medicine and the Duke Hospital were established in 1925 through the munificent gift of the late James B. Duke. The hospital and out-patient clinic will be open for patients on July 1, 1930, and carefully selected first and third year students will be admitted to the School of Medicine on October 1, 1930. Women will be received on the same terms as men.

In establishing the sixth medical school in North Carolina, Duke University has an unparalleled opportunity to aid in the solution of five of the greatest present medical problems, namely, (1) the inability of most medical students to obtain adequate interne hospital training because of the average age of twenty-six years at which they are graduated from medical school; (2) the lack of provision for intensive and extensive postgraduate education for physicians who have been in practice for several years; (3) the disproportion in the distribution of doctors in the cities and rural areas; (4) the dearth of university training for nurses and (5) the need of people of moderate means for diagnostic facilities and hospital treatment within their ability to pay.

The School of Medicine with laboratories and class rooms for three hundred students has been planned to insure the greatest correlation between the various departments.

The Hospital with its four hundred beds will have every modern convenience for the diagnosis, proper care, welfare and comfort of the patients, both private and charity, white and colored, whether they come from Durham or from a distance. The primary function of the hospital will be to provide the best of medical and nursing care. The arrangement and equipment of the out-patient clinic will furnish complete diagnostic facilities. In order to coöperate with the medical profession and to insure the best interests of the patients, it is highly desirable for those who contemplate coming to the hospital or out-patient clinic to consult and bring a letter from their own physicians. After discharge from the hospital, patients will be asked to return to their own physicians. In addition to the clinical facilities of the Duke Hospital and Out-Patient Clinic, the Trus-
tees of the Watts Hospital ( 220 beds) and of the Lincoln Hospital ( 108 beds) have very kindly granted teaching privileges to the Duke University School of Medicine.

## HOSPITAL

If a patient is recommended for admission to the hospital by his own physician and the admitting office, he may have a ward bed at $\$ 3.00$ per day (see last paragraph under OutPatient Clinic), or he may have a semi-private room at $\$ 4.00$ per day or a private room at $\$ 5.00$ to $\$ 9.00$ per day. No extra charge is made for the usual treatments, drugs and routine laboratory examinations but there is a charge for X-rays, operating room and special examinations and treatments. A deposit must be made in advance to cover the estimated hospital charges. Patients in semi-private and private rooms pay their own physician or surgeon for professional services. Those who are certified by their county welfare officers as unable to pay the ward rate of $\$ 3.00$ per day will be charged a reduced rate or will be treated free if hospital care is judged to be necessary by the hospital admitting office.

## OUT-PATIENT CLINIC

Daily, except Sundays and holidays, from $1: 30$ to $3: 00 \mathrm{p} . \mathrm{m}$., white patients will be admitted to the out-patient clinic (see last paragraph) for diagnosis and treatment in: General medicine, dermatology, roentgenology, physiotherapy, neurology, psychiatry, general surgery, urology, oto-laryngology, ophthalmology, orthopedics, dentistry, obstetrics, gynecology and pediatrics. A charge of $\$ 2.00$ toward the cost of service will be made for each visit, if the patient is able to pay; however, those accompanied by their own physicians will be admitted free. An extra charge will be made for the cost of X-rays, and special diagnostic procedures and treatments. Those who are certified by their county welfare officers as unable to pay the regular fees will be charged a reduced rate or will be treated free.

Daily, except Sundays and holidays, from $3: 30$ to $5: 00$ p. m., the out-patient clinic will provide a similar service for colored patients.

All patients in the out-patient clinic will be seen by appointment except in case of emergency. Emergency patients will be seen at any time. In order to coöperate with the medical profession, anyone who wishes to attend the clinic should consult his own physician and if the latter recommends an appointment at the clinic, it should be arranged by telephoning the clinic office (F-133), or by writing to the Admitting Office, Duke Hospital, Durham, N. C. If no advance appointment is made by telephone or by letter, a wait at the clinic office may be unavoidable. A cordial invitation is extended to physicians to accompany their patients.

The general policy of admitting patients to the wards and out-patient clinic will be to consider their financial and social status carefully ; income and size of family, special responsibilities and the probable cost of treatment all being weighed in determining admission. A married patient, for instance, with an income of less than $\$ 25$ per week will be considered admissible to the wards or out-patient clinic for ordinary conditions; the income limit, of course, varying according to the other factors which affect the patient's ability to pay. Those who are able to pay the ordinary fees of consultants and specialists will not be admitted to the out-patient clinic but may make arrangements through their own physicians for private appointments.

## PATIENTS

"Where will the patients for the Duke Hospital and School of Medicine come from?" is a frequent question. Many believe that a teaching hospital must be situated in a huge metropolis. However, in 1913, Osler pointed out that a large population was not essential for a medical school and that Marburg, in Germany, with twenty-three thousand people-half the size of Durham-maintained a medical school of the first rank. The populations of Jena and Heidelberg are very similar to that of Durham and they certainly have no dearth of patients. This statement of Osler's is even more true today because of the tremendous increase in the number of automobiles. For medical schools in large cities, automobiles, by increasing the traffic congestion, actually have reduced the amount of territory from
which patients may attend clinics. For instance, in New York and Chicago nearly an hour is required to go from the center of the city to the medical schools. On the other hand, with the splendid roads in North Carolina, patients can be brought long distances by automobiles in the same time and with more comfort and safety than is possible in traversing a large city. In addition to serving the 47,000 people of Durham, the staff, buildings and equipment should attract a number of patients from among the half million people who live within a fifty mile radius of Durham, as well as from more distant areas.

## SCHOOL OF NURSING

The establishment of a University School of Nursing through the coöperation of the University, School of Medicine and Hospital will meet a great need; it will raise the standard of nursing by the selection of pupil nurses upon the same basis as that of the women students of Duke University, by the provision for them of the same housing, recreational and educational advantages upon the campus of the Co-ordinate College for Women, by the use of ward maids to reduce the laborious part of nursing training so that the professional care of patients can be increased during the three years of the basic nursing curriculum which leads to the Diploma of Graduate Nurse, and by the giving of postgraduate instruction to nurses who have been trained elsewhere.

The first class of the Duke University School of Nursing will be admitted on January 2, 1931. The entrance requirements will be intelligence, character and graduation from an acceptable high school. The course leading to the Diploma of Graduate Nurse will consist of three years of eleven months each. The tuition will be $\$ 100$ per year. Application forms may be obtained by writing to the Dean, Duke University School of Nursing, Durham, N. C.

Duke University will grant the degree of Bachelor of Science to women who have completed successfully two years of college work ( 60 semester hours) in Duke University or an acceptable college or university in addition to the three year course leading to the Diploma of Graduate Nurse in the Duke University School of Nursing. The sixty semester hours of college work
can be completed either before or after the three year course in the School of Nursing, but not during it.

## SCHOOL OF DIETETICS

In addition to the training of medical students and nurses in dietetics, women whose previous training is acceptable will be admitted to the School of Dietetics and will be given a Certificate of Graduate Dietitian after the successful completion of the course of one year. Applications should be sent to the Professor of Dietetics, Duke University School of Dietetics, Durham, N. C.

## POSTGRADUATE STUDY

The need for more provision for postgraduate study is very acute not only in this country but abroad. There are very few clinics to which a physician can go, after he has been in practice several years, to obtain the additional training which he has found he requires. It is the plan of the School of Medicine to attempt to fill this need. If any doctor wishes to spend a few days, weeks or months reviewing his knowledge of medicine, surgery, obstetrics, pediatrics or other branches, or if he has to do an unusual operation and wishes to refresh his memory of the anatomy involved, the facilities and equipment will be at his disposal. The service of the School of Medicine will not be limited to the training of its own students and staff but will extend to giving the members of the medical profession the benefit of everything it has. Graduates in medicine will be especially welcomed at the varied clinics and demonstrations in medicine. surgery, obstetrics, pediatrics and other specialties which will be held from $9 \mathrm{a} . \mathrm{m}$. to $1 \mathrm{p} . \mathrm{m}$. each Saturday. Training in preventive medicine and public health, not only for the students in the School of Medicine, but also special work for those who wish to enter upon careers as health officers will be provided. Further information may be obtained by writing to the head of the department concerned or to the Dean, Duke University School of Medicine, Durham, N. C.

## INTERNESHIPS AND RESIDENCIES

Interneships of one year's duration with room, board, laundry and uniforms furnished, but without salary, are available in medicine (including dermatology, roentgenology, neurology, psychiatry, obstetrics, gynecology, and pediatrics), in surgery (including urology, oto-laryngology, ophthalmology, orthopedics, obstetrics and gynecology), or in pathology, commencing each January, April, July and October. Medical and surgical internes may elect any of the branches of medicine or surgery which they prefer as a major and six months of the total may be spent in that field; the remaining time will be divided among the other medical or surgical divisions. Internes in pathology will spend the full twelve months in that department. Application blanks, which must be returned at least three months before the appointment is desired, may be obtained by writing to the head of the department in which an interneship is wanted, Duke University School of Medicine, Durham, N. C. Graduates of any class A medical school are eligible for interneships.

After the completion of an interneship in the Duke Hospital or in an acceptable hospital, a certain number may be appointed as assistant residents in medicine, surgery, obstetrics, gynecology, pediatrics, pathology, biochemistry, or in any one of the medical or surgical specialties, at a salary of $\$ 250$ to $\$ 500$ per year, with maintenance, and eventually may be promoted to the residency in the various departments or sub-departments of the hospital at an annual salary of $\$ 500$ to $\$ 1,000$, with maintenance. Applications should be made to the head of the department concerned.

## LIBRARY

"To study the phenomena of disease without books is to sail an uncharted sea, while to study books without patients is not to go to sea at all.-Sir William Osler

In addition to the general library of Duke University, which has 200,000 volumes, the Duke Hospital Library contains 20,000 volumes of American and foreign medical literature. The hospital library subscribes to 300 current American and foreign medical and other scientific journals. These books and journals are available daily from 9:00 a. m. to $9: 00 \mathrm{p}$. m. for the students, nurses, staff and medical profession.

## APPLICATION FOR ADMISSION

Application forms may be obtained by writing to the Dean, Duke University School of Medicine, Durham, N. C. They must be filled in with typewriting, a $2 \mathrm{in} . \times 21 / 2 \mathrm{in}$. recent photograph attached and the application returned to the dean as soon as possible. Applications will be evaluated in the order received. If the information obtained is satisfactory, a personal interview with the dean or regional representative of the committee on admission will be arranged for the applicant. The applicant will then be notified as soon as possible whether he has been accepted or declined; if accepted, the student must send a deposit of $\$ 50$ within two weeks to insure his enrollment. This money will be applied toward the tuition. First year students will be admitted only in October at the beginning of the autumn quarter, but applications will be considered and a decision in regard to admission will be made at any time during the preceding year.

## REQUIREMENTS FOR ENTRANCE

[^74]Intelligence and character, plus two years of college work (70 semester hours), including:

Biology: At least one year of college work (8 semester hours, one half of which must be laboratory work).

Chemistry: At least two years of college work ( 10 semester hours of inorganic chemistry including short or preliminary courses in qualitative and quantitative analysis, and 6 semester hours of organic chemistry; one half of each course must be laboratory work). These represent the minimal requirements in chemistry. Additional courses in analytical and physical chemistry are desirable.

Physics: At least one year of college work ( 10 semester hours, one half of which must be laboratory work).

English: At least two years of college work ( 12 semester hours).

Mathematics: At least one year of college work ( 6 semester hours; a working knowledge of logarithms is essential and one of calculus desirable).

Languages: Two years of study of German and French in High School or in College are desirable but not a necessary requirement.

Selection will be based on the quality rather than the quantity of preparation.

## REASONS FOR ENTRANCE REQUIREMENTS

Students, who have been selected carefully on the basis of their intelligence and character, will be admitted to the School of Medicine after two years of college work for the following reasons:
(1) Two years of college work are sufficient for an adequate preparation in chemistry, biology, physics, English and mathematics; (2) two years of additional postgraduate interne training are more valuable than the junior and senior years in college ; (3) experience has demonstrated that the majority of medical students who have had four years of college work and who are, therefore, 21 or 22 years of age, rarely spend more than one year in postgraduate interne training; (4) there is no relationship between the quality of the student's intelligence and the quantity of hours spent in college; (5) a complete college course is unnecessary today because many of the subjects formerly studied in college are now taught in high school; (6) a reading knowledge of German and French is not necessary today because of the prompt abstracting of foreign medical journals; (7) culture is acquired more often at home and from associations and environment early in life than in college; (8) two years of training in the basic sciences after graduation from medical school are more valuable than the junior and senior years in college for those who later are to do scientific investigative work in medicine; (9) the junior and senior years in a college in which the gifted student is not given special advantages frequently cause habits of academic indolence; (10) the present average age of entering practice will be maintained if the two years which are usually spent in the junior and senior classes in college are applied to additional postgraduate interne training; (11) medical students who are 19 years of age usually learn more rapidly than those 22 years of age; (12) in medical schools in which there are students with
two, three and four years of college work it is often difficult to distinguish those who have had the different lengths of preparation.

## REQUIREMENTS FOR ADMISSION TO ADVANCED STANDING

In addition to the requirements for entrance, an applicant for admission to the third year class must present evidence that he will complete successfully the first and second year curriculum in a class A medical school consisting of: Gross and microscopic anatomy, biochemistry, pharmacology, physiology, gross and microscopic pathology, bacteriology, clinical microscopy, normal and abnormal physical diagnosis. Students who transfer from other medical schools can be admitted into any quarter for which their previous training has fitted them (see curriculum). For example, a student who has completed successfully the first and second year curriculum at another medical school is eligible to enter the summer quarter in June and to be graduated in December of the following year, or he can enter the autumn quarter in October and receive the M.D. degree in March or June two years later, depending on whether he attends the intervening summer quarter. Application forms may be obtained by writing to the Dean, Duke University School of Medicine, Durham, N. C.; they will be evaluated and a decision in regard to admission made as described for applications for admission.

## REQUIREMENTS FOR THE DEGREE OF BACHELOR OF SCIENCE IN THE SCHOOL OF MEDICINE

Duke University will grant the degree of Bachelor of Science to students who have completed satisfactorily 70 semester hours of college work in Duke University or an acceptable college or university, six quarters in the Duke University School of Medicine, creditable extra work in one or another department and have written a thesis. No credit will be given toward this degree for additional college work. Students who wish to become eligible for this degree should, as soon as possible after admission, arrange a program of extra work with the head of any department they desire.

## REQUREMENTS FOR THE DEGREE OF DOCTOR OF MEDICINE

Comprehensive group examinations in the preclinical subjects will be given to the students after they have completed six quarters, and in the clinical subjects at the end of the twelfth quarter. These examinations will be held at least twice each year to accommodate students who qualify for them at different times. They will demand a more comprehensive knowledge of medicine than can be obtained from the required courses in the schedule, and it will be necessary for the student to demonstrate that he has utilized profitably his free time. No numerical grades will be given; only the terms "passed" and "failed" will be used. The degree of Doctor of Medicine will be conferred upon those who, after fulfiling all the requirements for entrance, have completed satisfactorily twelve quarters of the curriculum of the School of Medicine and have passed the preclinical and clinical group examinations. Students in any class are admitted on the understanding that only those will be advanced who, in the opinion of the committee on instruction, give promise of being a credit to themselves and the school. At the end of each quarter, the committee on instruction will review the records of all students and those whose progress has been unsatisfactory will be advised to repeat the work of that quarter or to leave the school. Students who have been admitted to advanced standing and those who have studied at other medical schools for part of their course must present evidence that they have completed successfully work comparable to that of the curriculum during the quarters in which they were away.

All students are urged to spend three years in hospital or laboratory work after graduation and they must give assurance satisfactory to the committee on instruction that they will spend at least two years.

## CURRICULUM OF THE SCHOOL OF MEDICINE

A year of a student's life can be saved so that it can be applied to postgraduate interne training by condensing the usual four medical school years of thirty-three weeks each into three years of forty-four weeks each. Four terms of eleven weeks will be given each year, commencing October first, with vaca-
tions of one week in December, March and June, and of one month in September, and the degree of M.D., will be granted after the satisfactory completion of twelve terms. These may be taken consecutively (graduation in three calendar years), or three terms may be taken each year (graduation in four calendar years). Such a curriculum will affect in no way the courses at any other medical school. If students who have received their first two years of training at other medical schools wish to spend their clinical years at the Duke University School of Medicine, they are eligible in June or October for the seventh term, which corresponds to the beginning of the usual third year class.

The advantages of this continuous curriculum to the medical student are obvious. He will be one year younger at graduation and will have an additional year for hospital or other training; he will be better prepared, for he will not have lost a fortnight or a month in October of each year getting back into the intellectual stride which had been his in the preceding June, and he will see the clinical material peculiar to the summer months.

The disadvantages to the medical student have been overemphasized. For example, it is said that he needs four months of vacation. However, practically all medical students at the present time work during their summer holidays; fifty per cent study preclinical or clinical subjects in some place or other and if this time is spent under supervision at a medical school the character of the work will be improved and much valuable time saved. The fifty per cent who earn money during the summer vacations probably can earn more in the year which they will save under the four-quarter system than in the three periods of four months each. The Angier B. Duke Memorial and other loan funds, rather than scholarships, will do much to solve this phase of the problem. It has been said that a medical student cannot endure physically the work of forty-four weeks a year. If so, he probably should enter some less arduous occupation, for as a physician he undoubtedly will have to work as hard or harder for longer than forty-four weeks a year. The total of eight weeks of vacation, which every student will have under the four-quarter system should be sufficient for anyone. The argument that the summer climate of Durham or of any other city would be injurious to medical students is refuted readily by weather statistics, and also by the realization that the major
part of the population remains at work all summer and that practically all the physicians continue their practices. As a matter of fact, if any student prefers to study four calendar years of thirty-three weeks each he can do so under this flexible curriculum. A certain number of students, either through illness or through financial difficulties, probably will be absent one or more quarters, but under this curriculum they can take up their work at the beginning of the next quarter and not lose a whole year as is usually necessary. This irregularity is in itself an advantage, for $1 t$ will reduce the usual rigid lock-step succession of studies.

Approximately one half of the time in this curriculum is free for elective work or anything else which the student wishes to do. In the first year the greatest amount of free time is concentrated in the latter part of the year in order to give the student a more varied curriculum early in his course and thus enable him to choose elective courses from a wider range of subjects. The summer quarters of the first and third years have been left entirely free in the hope that many of the students will migrate to other medical schools in this country or abroad for elective work, a practice which should be encouraged. The establishment of the four quarter system at Chicago, Northwestern, Tulane and other universities will aid greatly this exchange of students. For students who do not attend the summer quarters, the spring quarters of the second and fourth years are free for the same purpose. The students who do not transfer temporarily to other medical schools may utilize their free time in elective courses in preclinical and clinical departments, may pursue independent work in any subject or may do research work. The elective courses have been organized for small groups and will be repeated if necessary in one or more quarters.

## Curriculum of Four Quarters of Eleven Weeks (429 Hours) Each

(The details of courses will be posted on the bulletin board)
Hours
Autumn quarter (1st)—Oct. 2-Dec. 20, 1930
Anatomy (including histology) ............. 429
Free time .......................................... 0
$\qquad$
Winter quarter (2d)-Jan. 2-Mar. 21, 1931
Physiology ..... 160
Biochemistry ..... 144
Free time ..... 125
Total ..... 429
Spring quarter (3d)—Mar. 30-June 13, 1931
Pharmacology ..... 56
Bacteriology ..... 88
Psychobiology ..... 16
Free time ..... 269
Total ..... 429
Summer quarter (4th)—June 22-Sept. 5, 1931 Free time ..... 429
Total ..... 429
Autumn quarter (5th)—Oct. 1-Dec. 19, 1931
Pathology ..... 288
Free time ..... 141
Total ..... 429
Winter quarter (6th)—Jan. 4-Mar. 22, 1932
Clinical microscopy ..... 96
Medical psychology ..... 16
Physical diagnosis ..... 160
Preclinical examinations ..... 39
Free time ..... 118
Total ..... 429
Autumn quarter (7th)—Oct. 2-Dec. 20, 1930*
Medicine (junior) (including pediatrics and preventive medicine) ..... 286
Free time ..... 143
Total ..... 429
Hours
Winter quarter (8th)—Jan. 2-Mar. 21, 1931*
Surgery (junior) ..... 154
Obstetrics (including gynecology) ..... 110
Free time ..... 165
Total429
Spring quarter (9th)—Mar. 30-June 13, 1931*
Specialties (junior) ..... 198
Free time ..... 231
Total ..... 429
Summer quarter (10th)—June 22-Sept. 5, 1931* Medicine (senior) (including pediatrics and preventive medicine) ..... 286
Free time ..... 143
Total ..... 429
Autumn quarter (11th)—Oct. 1-Dec. 19, 1931* Surgery (senior) ..... 220
Free time ..... 209
Total ..... 429
Winter quarter (12th)—Jan. 4-Mar. 22, 1932* Final clinical examinations. ..... 39
Free time ..... 390
Total ..... 429
Summary:
Total number of hours of required instruction. .2,785 (54\%)Total number of hours of free time........... 2,363 (46\%)
Total number of hours in curriculum ..... 5,148 (100\%)Changes from the Four-Quarter Schedule Necessary for Students WhoDo Not Attend the Summer Quarters; Third Year Students Admittedon October 1, 1930, Who Do Not Wish to Study During theSummer Quarter in 1931 Will Follow this ScheduleCommencing with the Autumn Quarter (10th)of the Fourth Year
First Year:Autumn quarter (1st) - No change from schedule.Winter quarter (2d) - No change from schedule.Spring quarter (3d) - No change from schedule.
Second Year:Autumn quarter (4th) - Same as fifth quarter in schedule.

[^75]Winter quarter (5th) -Same as sixth quarter in schedule except that the preclinical examinations are postponed to the end of the spring quarter and the amount of free time increased correspondingly to 157 hours.
Spring quarter (6th)-Same as fourth quarter except that the preclinical examinations are held and the amount of free time correspondingly decreased to 390 hours.

## Third Year:

Autumn quarter (7th) -Same as seventh quarter in schedule.* Winter quarter (8th) - Same as eighth quarter in schedule.*
Spring quarter (9th) - Same as ninth quarter in schedule.*

## Fourth Year:

Autumn quarter (10th) -Same as tenth quarter in schedule.*
Winter quarter (11th)-Same as eleventh quarter in schedule.*
Spring quarter (12th) -Same as twelfth quarter in schedule.*

## SCHEDULE OF INSTRUCTION

(The details of courses will be posted on the bulletin board)
In the clinical years the required instruction in medicine, surgery, obstetrics, gynecology, pediatrics and other specialties will be offered in each of the four quarters. Students may elect the quarters in which they study these subjects, but not more than ten students will be enrolled in surgery or medicine in any one quarter ; the names will be accepted in order of application. The schedule on the bulletin board merely illustrates the program for one group. For elective courses, students are referred to the bulletin board.

During the quarter devoted to the specialties, the student group will be divided into five sub-groups, each of which in rotation will spend approximately two weeks in each of the following specialties: Dermatology and syphilis; neurology and psychiatry, urology; orthopedics and physiotherapy; ophthalmology, oto-laryngology and dentistry.

Daily from 12 noon to $1 \mathrm{p} . \mathrm{m}$. during the autumn, winter and spring quarters, the following systematic lectures, clinics or demonstrations, will be given (students are expected to attend

[^76]at least three quarters): Medicine and medical specialties, Wednesdays and Saturdays (3 quarters) ; surgery and surgical specialties, Tuesdays and Fridays (3 quarters); obstetrics and gynecology, Mondays (3 quarters) ; pediatrics, Thursdays (2 quarters) ; preventive medicine and public health, Thursdays (1 quarter).

Every Saturday, from 9 a. m. to 1 p. m., varied clinics and demonstrations for students and visiting physicians will be held in medicine, surgery, obstetrics, pediatrics and other specialties.

## ANGIER B. DUKE MEMORIAL AND OTHER LOAN FUNDS

The Angier B. Duke Memorial, Incorporated, administers through an advisory committee of the officers of the University a loan fund for students. In addition, the University administers other endowed loan funds for the benefit of students who are not able financially to meet their expenses. Medical students, after their third quarter, are eligible for loans from these sources. No scholarships will be awarded in the School of Medicine. The loan funds are kept by the treasurer as separate and distinct funds from all other endowments and holdings of the University and are used for no other purpose than to aid worthy students of the University. These funds are administered in accordance with the following regulations:

1. No loan shall be made to a student who violates any of the regulations of the University or whose classwork is not satisfactory to the committee on instruction.
2. Loans will be made only to students who are taking full courses of study that lead to a degree, and all loans must be arranged not later than one week after the beginning of a quarter.
3. Every applicant for a loan must present with the application such security as the president of the University may approve, and no money shall be advanced before a note with approved security is in the hands of the treasurer of the University.
4. No loan shall be made to defray any other expenses than those incurred during the academic year for tuition, board and room-rent.
5. Interest at the rate of six per cent annually shall be charged for all loans of money, and the interest must be paid annually.

## INFORMATION AND REGULATIONS CONCERNING FEES AND EXPENSES

All fees for each quarter are due and payable at the beginning of each quarter ; no student will be admitted to classes until his or her fees have been paid at the university treasurer's office.

## Fees and Expenses

Tuition, per quarter . .................................... . . $\$ 150.00$
Room rent, per quarter* .................................. 50.00
Board, per quarter* ........................................ 75.00
Laundry, per quarter ..................................... . . 10.00 to $\$ 20.00$
Books, per quarter ..................................... 10.00 to 20.00
Microscope, each student must own a modern
microscope as soon as he matriculates.............. . 100.00 to 150.00
Damage fee, payable at matriculation and returnable
at graduation if no damage occurs
10.00

Athletic fee (optional), admitting students to all
athletic contests held on the university
grounds, per year
10.00

Estimated total expenses, exclusive of clothes, micro-
scope, damage and athletic fees, per quarter
(students may study three or four quarters
per year)**
$\$ 295.00$ to $\$ 315.00$

[^77]THE SUMMER SCHOOL


# THE SUMMER SCHOOL 

## ADMINISTRATIVE OFFICERS

WILLIAM PRESTON FEW, A.B., A.M., Ph.D., LL.D., President of Duke University

ROBERT LEE FLOWERS, A.M., LL.D., Vice-President of Duke University and Member of the Faculty Committee on the Summer School

WILLIAM HANE WANNAMAKER, A.B., A.M., Litt.D., Vice-President of Duke University and Member of the Faculty Committee on the Summer School

HOLLAND HOLTON, A.B., J.D., Director of the Summer School and Chairman of the Faculty Committee on the Summer School

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            WILLIAM JOSEPH HENRY COTTON, (Duke University),
    A.B., Temple University; A.M., Ph.D., University of Pennsylvania;
                                    Economics.
                                    BERT CUNNINGHAM,
                                    (Duke University),
B.S., M.S., Illinois Wesleyan; A.M., Duke; Ph.D., University of Wisconsin;
                        Biology.
        WILLIAM WHITFIELD ELLIOTT,
                (Duke University),
B.A., Hampden-Sydney; M.A., University of Kentucky; Ph.D., Cornell;
                        Mathematics.
                    PAUL NEFF GARBER,
                            (Duke University),
A.B., Bridgewater; A.M., Ph.D., University of Pennsylvania; Crozer
                    Thcological Seminary, 1919-21;
                    Religion: Church History.
            WALTER KIRKLAND GREENE,
                (Dukc University),
            A.B., Wofford; A.M., Vanderbilt; A.M., Ph.D., Harvard;
                        English.
            WILLIAM HOLLAND HALL,
                (Duke University),
    A.B., A.M., Duke; B.C.E., University of Michigan; M.S.C.E.,
            University of Wisconsin;
                                    Engineering.
            CHARLES CLEVELAND HATLEY
                (Duke University),
            A.B., Duke; A.M., Ph.D., Columbia;
                    Physics.
                    HOLLAND HOLTON,
                (Duke University),
    A.B., Duke; J.D., The University of Chicago; The University of
                Chicago, 1926-27;
                Education.
            CALVIN BRYCE HOOVER,
                (Duke University),
A.B., Monmouth College; University of Minnesota, 1923-25; Ph.D.,
                                    University of Wisconsin;
                    Economics.
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Duke University ..... 221
BRADY RIMBEY JORDAN,
(Duke University),
Litt.B., Princeton; Ph.D., Wisconsin;French.
CHARLES ALBERT KRUMMEL,(Duke University),
Ph.B., Central Wesleyan College; Ph.M., Syracuse University; Ph.D.,University of Wisconsin; University of Marburg, 1910;German.JESSE MARVIN ORMOND,(Duke University),A.B., Duke; B.D., Vanderbilt;Sociology.
ARTHUR MARCUS PROCTOR,(Duke University),
A.B., Duke; A.M., Columbia; Columbia, 1921-23, 1929-30;Education.
WILLIAM WALTER RANKIN,(Duke University),
B.E., North Carolina State College of Agriculture and Engineering; M.A.,Úniversity of North Carolina; Harvard, 1914-15; Columbia, 1919-21;Mathematics.
HERSEY EVERETT SPENCE,(Duke University),
A.B., A.M., B.D., Duke; The University of Chicago, 1927-28;Religious Education.
ROBERT NORTH WILSON,(Duke University),
A.B., Haverford; M.S., University of Florida; Harvard, 1905-06;University of Illinois, 1923.24;Chemistry.
THOMAS PERKINS ABERNETHY,(University of Alabama),A.B., M.A., College of Charleston; A.M., Ph.D., Harvard; History.
ANDREW RUNNI ANDERSON, (University of Utah), A.B., University of Wisconsin; Ph.D., Harvard; Latin.

ROBERT LEE BATES,
(Virginia Military Institute),
A.B., LLL.B., West Virginia Unıversity; A.M., Ph.D., Juhns Hopkins University;
Psychology.
JOHN WINDER CARR, Jr., (Duke University),
A.B., Duke; A.M., Ph.D., Columbia; Education.

LEWIS CHASE, (Duke University), A.B., A.M., Ph.D., Columbia; English.

LUTHER MASON DIMMITT, (Duke University),
B.A., Westminister College (Mo.); A.M., University of Texas; Tb.M.,

Princeton; University of Pennsylvania, 1927; Columbia, 1926-28; Education.

HASTINGS EELLS, (Ohio Weslcyan University),
A.B., Clark University; A.M., B.D., Princeton; Ph.D., Yale; Brussels University, 1921.22; Ghent University, 1928-29; History.

WILLIAM DANIEL ELLIS, (Principal of Richmond Normal School, Richmond, Va.), A.B., A.M., Randolph.Macon; A.M., Columbia; Columbia, 1922-23, 1929-30; Education.

GEORGE HOBEN ESTABROOKS, (Colgate University),
B.A., Acadia University; Diploma of Education, Diploma of Anthropology,

Oxford University; Ph.D., Harvard; Psychology.

GEORGE DEWEY HARMON, (Lehigh University),
A.B., A.M., Duke; University of Pennsylvania, 1923-25;

History.
EVELYN JONES HAWKES, (New Jersey College for Women),
A.B., A.M., Duke; Pb.D., University of Pennsylvania; Education.

CHARLES E. LANDON, (Duke University), A.B., A.M., University of Kansas; Ph.D., University of Illinols; Economics.

EDWIN RAY HUNTER, (Maryville College),
A.B., Maryville College; A.M., Ph.D., The University of Chicago; English.

JOHN THOMAS LISTER, (College of Wooster),
A. H., Butler College; Ph.B., A.M., Ph.D., The University of Chicago:

Universite de Geneva, 1901;
Spanish.
EDWARD ROY CECIL MILES, (Duke University),
B.S., Georgia School of Technology; M.A., Harvard; Ph.D., Rice Institute; Mathematics.

ROBERT BELL MICHELL, (University of Wisconsin), R.A., University of Toronto; A.M., Harvard; Ph.D., Wisconsin; French.

FRANK KIRBY MITCHELL, (Duke University),
A.B., Millsaps; A.M., Michigan; Oriel College, Oxford, 1921-24;

Enclish.

KARL BACHMAN PATTERSON, (Duke University),<br>A.B., Roanoke College; A.M., Princeton; Johns Hopkins University, 1908-09; University of Pennsylvania, 1909-11; Mathematics.

ROBERT STANLEY RANKIN, (Duke University),
A.B., Tusculum College; A.M., Ph.D., Princeton; Economics.

ALBERT GRANBERRY REED, (Louisiana State University),
A.B., Vanderbilt; M.A., Yale; Pb.D., Harvard; English.

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                    CULVER HAYGOOD SMITH,
    (Carnegie Institute of Technology),
    A.B., Duke; A.M., Yale; Yale, 1923-25; Duke University, 1929-30; History.
ANCEL ROY MONROE STOWE, (Randolph-Macon Woman's College),
Ph B., A.M., Northwestern University; A.M., Harvard; Ph.D., Columbla. Education.
DENNIS CLAYTON TROTH, (University of Illinois), B.Ed., A.M., Ph.D., University of Washington; Education.
WARREN CHASE VOSBURGH, (Duke University), B.S., M.S', Union College; Ph.D., Columbia; Сhemistry.
LORING BAKER WALTON, (Duke University), A.B., Princeton; Lic.èt L., Harvard; Sorbonne, 1922-24; French.
FREDERICK ELIPHAZ WILSON, (Duke University),
A.B., Oberlin; A.M., Columbia; Leipzig, 1916-17; Harvard, 1922-23; German.
ROBERT RENBERT WILSON, (Duke University), A.B., Austin College; A.M., Princeton; Ph.D., Harvard; Economics.
GEORGE SHERMAN AVERY, Jr., (Duke University),
B.S., Tulane; M.S., Dartmouth; Ph.D., University of Wisconsın; Botany.
HENRY STODDARD CURTIS,
(State of Missouri, Director of Hygiene and Physical Training), A.B., Olivet College (Mich.); A.B., Yale; Pb.D., Clark. Education.
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Duke UniversityKADER RANDOLPH CURTIS,(Superintendent of Wilson County and City Schools).A.B., Wake Forest; Duke University, 1927-28;Education.THERESA DANSDILL,(Director of Child Health Education, North CarolinaTuberculosis Association),A.B., Des Moines University; A.M., Columbia;Health Education.
IONE HENDERSON DUNN,(Asheville Teachers College),
A.B., North Carolina College for Women; M.Ed., Duke:Education.
MILDRED ENGLISH,(Assistant Superintendent, Raleigh City Schools),B.S., M.A., Peabody; Columbia;Education.
OSCAR ALEXANDER HAMILTON,(New Hanover County Schools),
A.B., University of North Carolina; A.M., Columbia;Education.
CHARLES ROY HAUSER,(Duke University),
B.S., M.S., University of Florida; Ph.D., University of Iowa:Chemistry.
LEMUEL ROY JOHNSTON,(Principal High Point High School),
A.B., University of North Carolina; A.M., Columbia;Education.
ARCHIBALD CURRIE JORDAN,(Duke University),A.B., Duke; A.M., Columbia; Columbia, 1924-25;English.
MATILDA OSBORNE MICHAELS,
(Supervisor Durham County Schools),
A.B., Duke; A.M., Columbia;
Elementary Education.225

JESSE LEE PETERSON,
(University of Florida), A.B., A.M., Duke; Columbia, 1926-27; English.

ESTELLE RAWL, (Supervisor Charlotte City Schools), A.B., Winthrop; Smith College, 1922-23; Chicago, 1926-27; Elementary Education.

JOHN HENRY SAYLOR, (Duke University),

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A B., Southern Methodist University; A.M., Duke; Duke, 1928-30;
``` Сhemistry.

JOHN HERMAN SHIELDS, (Duke University),
A K.. A.M., University of Texas; Columbia University, 1924.26; Economics.

FREDERICK EDWARD STEINHAUSER, (Duke University), A.B., A.M., University of Chicago; Spanish.

JANE CAROLINE SULLIVAN, (High School Supervisor, Buncombe County), A.B., Duke; A.M., Columbia; Primary Education.

CHARLES EUGENE WARD, (Duke University), A.B., Baker University; A.M., Duke; Duke, 1928-29;

English.

CLARENCE SHAW WARREN, (Superintendent Lenoir City Schools),
A.B., Duke; Education.

AUGUSTA MICHAELS ALSTON, (Durham City Schools), A.B., Duke; Drawing.

BARTEL L. DEBRUYNE, (Durham High School),
Graduate High Commercial School, Osnabrück, Germany;
High School Demonstration Teacher in Mathematics.

\section*{CANEY EDWARD BUCKNER,} (Durham High School),
A.B., A.M., Duke;

High School Demonstration Teacher in History.
ALFRED DIXON CALLIHAN, (Duke University), A.B., Marshal College; Assistant in Physics.

ATHEY GRAVES GILLASPIE, (Duke University),
B.S., Lynchburg College; Cornell, Summer 1928; Duke, 1929-30; Assistant in Chemistry.

ELIZABETH GRAY, (Durham City Schools), A.B., A.M., Duke;

Primary Demonstration Teacher.
WILBERT ARMONDE JENKINS, (Fellow in Biology, Cornell University), A.B., A.M., Duke; Cornell, 1929-30;

Biology.
PATTE JORDAN, (High Point City Schools), A.B., North Carolina College for Women; Intermediate Grade Demonstration Teacher.

ALVIN VELBERT METLER, (Duke University),
B.S., Adrian College; University of Michigan, 1927-28; Duke, 1929-30; Assistant in Chemistry.

\section*{HUBERT WESLEY STEPHENS}
(Duke University),
B.S., Illinois Wesleyan University;

Assistant in Physics.

\section*{THE SUMMER SCHOOL}

\section*{RAPID GROWTH OF THE DUKE UNIVERSITY SUMMER SCHOOL}

Trinity College, which in 1925 expanded into Duke University, conducted its first summer school in 1919. The growth of the school has been not only rapid but steady since that time. In 1919, there were enrolled eighty-eight students of college grade, of whom sixty-five were teachers. In 1929 there was a total of 1452 registrations in the Summer School of Duke University and affiliated schools. Of these, 765 students enrolled in the first term of Duke University Summer School, and 447 in the second term; 214 were enrolled in the Junaluska Summer School, Inc., at Lake Junaluska; and 26 were enrolled in the Junaluska School of Religion. Deducting from the total number of registrations those who registered for two terms, there were 1171 students enrolled for either six or twelve weeks in the summer of 1929.

\section*{AFFILIATED SUMIMER SCHOOLS}

The Junaluska Summer School, Inc., Lake Junaluska, N. C., is an independent school affiliated with Duke University. It will offer courses primarily for high school graduates and teachers holding the elementary certificates. It will also offer freshman and sophomore college work in Biblical literature, education, English, history, sociology, Spanish, and other undergraduate courses for high school teachers. The only graduate work offered will be in field botany. (For further information address Professor B. G. Childs, Director, Duke University, Durham, N. C., and see description of courses, pages 255 to 265.) Junaluska Summer School will begin its single term June 10 and close July 19, making it possible for a student attending Junaluska to transfer to Durham in time for the second term, July 21 to August 28.

The Junaluska School of Religion, affiliated with the School of Religion, will offer work at Lake Junaluska July 21 to August 30. (For further information address Dr. Elbert Russell, Act-
ing Dean, School of Religion, Duke University, Durham, N. C., and see description of courses on pages 266 to 269.)

\section*{CALENDAR}

The Summer School will open June 10. The first term of the school will close July 19. The second term will begin July 21 and will close August 28. Recitations will be held five days in the week, all Mondays except June 23, July 7, July 21, August 4, and August 18 being holidays. July 4 will be observed as Independence Day.

\section*{REGISTRATION}

Saturday, June 7.is registration day for Durham County and City teachers and for all other students in Durham on that day. Monday. June 9, is registration day for out-of-town students. All such students should be present at 2 P.M. to submit their credentials for admission, to select their courses, and to make arrangements concerning board and lodging. Students arriving after 5 P.M., Monday, will register Tuesday, June 10, 8:30 A.M., or 2 P.M. Regular classes will meet at \(8: 15\), Tuesday morning, and recitation work will begin at once according to schedule.*

For the second term, Saturday, July 19, is registration day, and classes will begin Monday, July 21, according to schedule.

\section*{BUILDINGS AND EQUIPMENT}

The work for the Summer School of 1930 will be conducted largely in the unit of new buildings on the old campus. This unit consists of an auditorium, a science building, an apartment building, and five dormitories. All buildings in this new group are in Georgian style of architecture, constructed of Baltimore brick and trimmed with Vermont marble. They are fireproof in every respect.

Each of the five new dormitories has eighty-one students' rooms and houses one hundred and sixty-two students. One of the men's dormitories will be reserved exclusively for advanced students, and a wing of one of the women's dormitories will be similarly reserved. In all dormitories the same rules

\footnotetext{
* N. B.-Students who register late are marked absent for all classes held prior to their registration. Late registration very seriously affects credits that may be obtained.
}
and regulations obtain as during the regular academic year. In the graduate dormitories all radios, graphophones, and other noise-making appliances are strictly forbidden.

The Union Building is to be the center of all social activities: besides containing two large student dining rooms, this building has a faculty dining-room, a guests' dining-room, two lounge rooms, offices for the manager and his staff, service-rooms, and rooms for every organization and activity; here will be found the post office, college barber shop, express office, and headquarters of all publications and student organizations.

\section*{ADMISSION}

Applicants for admission must have completed a high school course. As evidence of this, a teacher's certificate of grade as high as North Carolina elementary will be accepted from teachers with two or more years of experience. Certificates and other credentials must be submitted to the Committee on the Summer School at the time of registration. Students who wish to enroll for graduate credit should submit their credits from other institutions to the Director of the Summer School before registration, preferably by mail.

\section*{SCOPE AND PLAN}

The courses are designed to meet the needs of teachers who desire professional training and further academic instruction, of college students who desire to hasten the completion of their college work, and of graduate students desiring to continue their work toward a higher degree.

Professional courses are offered for the following grades of teachers:
1. Teachers in elementary schools: the "North Carolina 'Uniform Curricula' for Elementary Teachers." (See pages 244 to 246.)
2. Teachers of primary and grammar grades. (See pages 242 to 244. This work is stressed in the session of 1930.)
3. High school teachers. (See pages 241 and 242, and for subjectmatter work in the high school subjects, pages 246 to 254.)
4. Teachers who desire credit for degrees in Duke University. (For graduate work in each department, see courses designated " G ," pages 239 to 254.\()\)
5. Superintendents, supervisors, and principals of schools. (See pages 239 to 241 .)

For college students, as well as for teachers, instruction, graduate or undergraduate, is offered as designated on pages 239 to 254 , in the following subject: education, Biblical literature, biology, chemistry, engineering, English, economics and government, French, German, history, religious education, Latin, mathematics, physics, psychology, and Spanish.

\section*{CREDITS}

The professional credits offered are accepted by the State of North Carolina in accordance with the rules issued by the State Department of Education.

College credits are offered as follows: A course of five hours a week for six weeks counts for two semester-hours of credit. a course of seven hours and a half a week for six weeks counts for three semester-hours of credit, and a course of ten hours a week for six weeks counts for four semester-hours of credit in Duke University. No student is given credit for more than six semester-hours of work or allowed to take more than fifteen hours of work a week without the consent of the Director and of the instructor in whose department the student expects to do his major work.* Graduate students are not under any circumstances allowed credit for more than six semester-hours in a summer school of six weeks.

The nature of the credit allowed for each course is designated by the following letters: C, collegiate A.B. degree; G, graduate A.M. or M.Ed. degree. Courses marked C* are intended only for students who have had two or more years of standard college training. Courses marked both C* and G are open only to students who have had three or more years of standard college training except by special permission of the Council on Graduate Instruction.

Students registered for graduate courses in the Summer School, who desire to have their work credited toward the master's degree, should also register in the office of the Dean of the Graduate School during the first week of each summer term.

\footnotetext{
* No undergraduate student who has failed to make superior average in his las* preceding work in the University can obtain permission to take excess work; and no student liable to suspension from the University under its rules regarding failure is permitted to enroll in summer school.
}

\section*{GRADUATE INSTRUCTION}

Students who have received a bachelor's degree for a four years' undergraduate course from a college of sufficiently high standing may be admitted to take courses in the Graduate School of Arts and Sciences of Duke University. The department concerned will determine whether a student is prepared to take any particular course. Admission to graduate courses does not necessarily imply admission to candidacy for a degree. A candidate for admission as a graduate student should present satisfactory evidence that he has received a bachelor's degree from a college or university which is a member of the Association of Colleges and Secondary Schools of the Southern States or of one of the similar associations in other sections of the country (provided that the degree must have been conferred after the admission of the college or university to membership in said association); or from a North Carolina college whose bachelor of arts' or other bachelor's degree is accepted by the State Department of Education as the basis for issuing the high school or primary certificate of Class A. A degree from an institution outside of the state of North Carolina, not provided for above, may be accepted when an investigation in the individual case shows that qualifications are satisfactory.

\section*{ADVANCED DEGREES}

The degrees offered in the Graduate School of Arts and Sciences are master of arts (A.M.), master of education (M.Ed.), and doctor of philosophy (Ph.D.). Some departments of the University are now prepared to give a full program of work leading to the degree of doctor of philosophy; other departments are gradually enlarging the scope of their instruction. As rapidly as is consistent with careful selection, new appointments are being made to the faculty of professors who will give their attention primarily to graduate courses and the direction of research.

\section*{admission to candidacy for a degree}

A graduate student who desires to be accepted as a candidate for a degree should file with the Dean of the Graduate School an official transcript of the record of his undergraduate work and also of any graduate courses he may have completed. He should also confer with the head, or chairman, of the department in which he desires to take his major work. Applications for admission to candidacy for the degree of master of arts or master of education should be made at the begiming of the first year of graduate work, and for the degree of doctor of philosophy at the beginning of the second year of graduate work. Before receiving recognition as a candidate for a degree, the student must satisfy both the general requirements of the Graduate School and the special requirements of the department in which he is taking his major work.

\section*{THE DEGREE OF MASTER OF ARTS}

Candidates for the degree of master of arts are required to have a reading knowledge of two foreign languages, evidenced by examination or by credit obtained for at least six semester-hours of college work ir
each. If this requirement has not been satisfied before admission to candidacy for the degree, the required foreign language work must be completed before the degree is conferred and will not be counted for credit toward the degree. The two foreign languages offered must be acceptable to the department in which the candidate is taking his major work.

To obtain the degree of master of arts a candidate must complete satisfactorily twenty-four semester-hours of graduate courses and a thesis. The credit for the thesis is six semester-hours. Each candidate for the degree must select a major subject in which the minimum requirement is twelve semester-hours and the thesis. [Before selecting his major in a department, a student must have completed a minimum of twelve semester-hours of approved preliminary courses in that department and twelve additional semester-hours either in that department or in related work.] A candidate must take six semester-hours of graduate work in a minor subject approved by the major department, and the remaining six semester-hours in the major or minor subjects or in a department approved by the major department and by the Graduate Council. No undergraduate course may be credited toward the degree of master of arts.

\section*{MINIMUM RESIDENCE REQUIREMENT}

The minimum residence requirement of candidates for the master's degree is one academic year. Often a longer period of residence will prove necessary. In the case of graduate students who take all the work for the master's degree in the Summer School, the minimum residence requirement is five summer terms of six weeks each.

\section*{DEGREE OF MASTER OF EDUCATION}

The degree of master of education is granted to teachers, or others engaged in educational service, upon completion of the prescribed program of study. Candidates for the degree must have had two years of practical experience in teaching when the degree is conferred. This experience may be obtained in the two years immediately prior to entering upon candidacy for the degree, or it may be obtained concurrently with the period of study for the degree.

A preliminary requirement for admission to candidacy for this degree is the completion of a minimum of twelve semester-hours of approved undergraduate work in education, including work in educational psychology and work in either history of education, educational sociology, or school administration.

The requirements for the degree of master of education are twentyfour semester-hours of graduate courses and a thesis. Candidates must take a minimum of twelve semester-hours of work and write a thesis in the Department of Education. At least six semester-hours must be taken in some department other than the Department of Education. Students who are preparing to teach are advised strongly to take twelve semester-hours of graduate work in the subjects they intend to teach. In such cases the thesis may be prepared under the joint supervision of
a department in which the student intends to teach and the Department of Education.

The residence requirements for the degree of master of education are the same as those for the degree of master of arts.

\section*{THESIS FOR THE MASTER'S DEGREE}

The title of the thesis required in partial fulfilment of the requirements for the degree of master of arts or master of education must be approved by the department or departments concerned and filed with the Dean of the Graduate School on or before November 1 of the academic year in which it is expected that the degree will be conferred.

Three bound typewritten copies of each thesis must be submitted to the Dean of the Graduate School in approved form on or before May 15 of the year in which the degree is conferred. The thesis is passed upon and accepted or rejected by an examining committee of three members of the faculty. Each candidate is required to appear before the committee for an oral examination on the thesis.

\section*{SUMMER SCHOOL WORK FOR THE MASTER'S DEGREE}

Graduate students may not receive more than six semester-hours of credit for work taken in one summer session of six weeks. The degree of master of arts or master of education can be earned in five such summer sessions by students who are well prepared for graduate work. All the work offered for the master's degree must be completed within a period of six years.

\section*{CRESIT TOWARD TIIE MASTER'S DEGREE FOR WORK DONE ELSEWHERE}

No credit toward advanced degrees is given for university extension or correspondence courses.

Not more than six semester-hours of credit toward the master's degree may be given to graduates of Duke University or of other approved colleges or universities for acceptable graduate courses or researci work completed elsewhere. Such credit shall not shorten the minımum period of residence required at Duke University.

\section*{FORMER REGULATIONS}

Students who began graduate work at Duke University for the master's degree before June, 1930, may complete the requirements for the degree under the regulations published in the Summer School announcement for 1929 and in the bulletin of the Graduate School of Arts and Sciences for the academic year 1928-1929.

\section*{DEMONSTRATION SCHOOL}

A demonstration school for primary and grammar-grade teachers is conducted for observation and demonstration work. The term begins Monday, June 16, and closes Saturday, July
26. High school teachers will have opportunity to do observation work in American history and plane geometry.

\section*{ROOMS AND BOARD}

Board and room for a term of six weeks may be secured in the University dormitories at the rate of \(\$ 45.50\) per occupant with two in a room, or \(\$ 55.00\) if room alone is engaged. The new dormitories, Numbers 2 and 3, will be reserved for women students, and Dormitories 4 and 5 for men students. Dormitories 3 and 4 will be reserved primarily for advanced students, and Dormitories 2 and 5 for undergraduates. There is no dormitory reserved for married students, and children are not under any circumstances admitted to the dormitories. Students desiring to bring children, or married students desiring rooms, should write the Director for a list of private rooming places where suitable accommodations may be obtained. Occupants of University rooms furnish their own bedclothes, pillows, and towels. All other essentials are supplied by the University.

All occupants of Dormitories 2 and 3 board in the Union, and occupants of Dormitories 4 and 5 are advised to board there, on account of the opportunity to meet at meal-time with their fellow-students, and because of the fact that the greater number of students guarantees better board for all, board being furnished at cost. The service is cafeteria plate-service. Students in Dormitories 4 and 5 who desire to board elsewhere will pay room-rent at the rate of \(\$ 12.50\) with two in a room or \(\$ 22.00\) for room alone. Students rooming off the campus who desire board in the University Union obtain it for \(\$ 37.50\) for the term.

\section*{FEES}

Teachers are not required to pay tuition fees. All other students are charged a tuition fee of \(\$ 3.00\) for each college credit hour, or \(\$ 1.50\) for each semester-hour. All students, teachers included, pay a registration fee of \(\$ 17.00\) per term, which includes the cost of a recreation ticket entitling them to admission to the tennis courts and swimming pool and to all recreational programs, including plays, lectures, etc. Students in the sciences pay the laboratory fees required in regular term work. Students who enroll for more than the normal schedule of work are charged an excess registration fee of \(\$ 5.00\).

Major expenses may be estimated as follows for each term:
Registration ....................................................... \(\$ 17.00\)

Room rent and board .......................................... 45.50
Total major expenses to teachers .......................... \(\$ 62.50\)
To this total should be added the tuition fee of \(\$ 9.00\) or \(\$ 12.00\) charged students other than teachers in the public schools, about \(\$ 7.00\) for books, and probably \(\$ 3.00\) for miscellaneous expenditures.

\section*{COURSES FOR STUDENTS ENTERING COLLEGE}

Increasing numbers of students, particularly those who contemplate entering a medical school, desire to complete the college course in three years. To meet the needs of these students, the Summer School offers a number of courses in freshman college work, enabling 1930 graduates of high school to begin their college course in the summer instead of waiting until September.

\section*{RESERVATION IN ADVANCE}

Classes are of limited enrollment. All students should enroll promptly, for all applications, both for classes in which the applicant desires to enroll and for rooms, will be filed in the order in which they are received. Each application for a reservation should be accompanied by a check for \(\$ 5.00\) in part payment of the registration fee. This check reserves a room also if the student states a desire to room in one of the university buildings. Make all checks payable to the Summer School of Duke University.

\section*{REDUCED RAILROAD FARES}

Reduced railroad rates on the round trip identification plan have been authorized from all stations in North Carolina, South Carolina, Virginia, Georgia, and Florida (except those on Louisville and Wadley Railway, Wadley Southern Railway, Sylvania Central Railway, and Winston-Salem Southbound Railway) ; also from West Virginia east of and including Williamson, via Norfolk and Western Railway. Address the Director of the Summer School for identification blank.

\section*{APPOINTMENT BUREAU}

A teachers' appointment bureau is maintained for the benefit of teachers desiring a change of position. There is no charge for this service.

\section*{RECREATION AND ENTERTAINMENT}

At the time of registration a season ticket to recreation programs is given to each student. In addition to the right of attending the plays, concerts, and other features of entertainment provided, this ticket entitles the student to use of the tennis courts and of the swimming pool. The swimming pool is open an hour and a half daily for various groups of students. The Quadrangle Pictures, sponsored by the University Y. M. C. A., present an early-evening program twice a week. Three of these programs are included in the features covered by the recreation ticket. There are also early-evening programs of plays and games planned for out-of-doors three or four evenings weekly.

\title{
COURSES OF INSTRUCTION
}

\section*{EXPLANATIONS AND ABBREVIATIONS}

Classes meet daily five times per week for six weeks unless otherwise indicated. Classes that meet for fifty-minute periods are indicated as carrying two semester-hours of credit. Classes meeting eighty-minute periods daily count for three semester-hours except where credits are stated otherwise.

Courses are arranged alphabetically by departments, except that courses in Education are listed first for the convenience of the large number of teachers who enroll primarily for professional credits. Subdivisions in Education indicate special classes of teachers for whom each group of courses was primarily planned. The number attached to a course, except in case of courses not given the preceding term or in the case of courses designated by the North Carolina State Department, are the same numbers used in describing courses in the regular term, with the letter "S" preceding; for example, Education S 6a and S 6b would correspond to Education 6 of the regular term, "a" and "b" being subdivisions of the complete course. The letters beyond " \(b\) " indicate work in the same field as the main course but not duplicating the work listed in the preceding university catalogue.

In the description of courses the following abbreviations occur: \(C\) following a course means that the course carries credit for the A.B. degree; \(C^{*}\), credit toward the A.B. degree for students having completed two or more years of college work; \(G\), credit towards a graduate degree; the numeral 1 means that the course comes the first one-hour period daily, beginning at \(8: 15 ; 2\), the second one-hour period, beginning at \(9: 15 ; 3\), the third one-hour period beginning at \(10: 15\); etc. \(A\) means that the course comes the first eighty minutes daily, beginning at \(8: 15 ; B\) means that the course comes at the eighty-minute period beginning at \(9: 45 ; D\) means that the course meets an eighty-minute period daily, beginning at \(11: 45\); \(I\) means that the course is offered the first term; \(I I\), that it is offered the second term ; \(I, I I\), that the course is offered either term. Periods \(1,2,3\), and 4 do not conflict, and periods \(A, B\), and \(D\) do not conflict; but period \(A\) conflicts with 1 and \(2, B\) with 2 and 3 , and \(D\) with 4.
N.B.-Different State Departments of Education grant professional credit for various courses in accordance with their own carefully defined rules. Every student should inquire carefully at or before registration as to what professional credit is allowed for each course in his state.

\section*{EDUCATION \\ COURSES PRIMARILY FOR SUPERINTENDENTS, PRINCIPALS, AND SUPERVISORS}
(Superintendents, principals, and supervisors will find specialized courses grouped under courses designated "Primarily for High School

Teachers" and "Primarily for Grammar-Grade and Primary Teachers." It is recommended that some work be elected from these speciai groups. Attention is called to the courses described immediately below as Major Course for County Superintendents and Principals, Major Course for City School Superintendents and Principals, Major Course for Elementary Supervisors and Principals of Elementary Schools, Major Course for High School Teachers.)

M43. Major Course for County School Superintendents and Principals.This course includes S 43 below and allied work selected by the student, with the approval of the instructor in charge of course S43. Schedule to be arranged. 6 s.h. \(\dagger I,-C^{*}, G\). Mr. Proctor and Others (Class enrollment limited to 15 .)

N21. Major Course for City School Superintendents and Principals.-This course includes course \(\mathrm{S} 13^{e}\) and allied work selected by the student, with the approval of the instructor in charge of \(\mathrm{S} 13^{\circ}\). Schedule to be arranged. 6 s.h. \(I I-C^{*}, G\).

Mr. Proctor and Others
(Class enrollment limited to 15. )
M32. Major Course for Elementary Supervisors and Principals of Elementary Schools,-This course includes S32 below and allied courses selected by the student, with the approval of the instructor. Term papers and uther assignments and special conferences will center around the technique of teaching and administering the course of study in the elementary school. Schedule to be arranged. 6 s.h. \(I, I I-C^{*}, G\).

> Mr. Carr and Others (first term)

Mr. Ellis and Others (second term)
(Class enrollment limited to 15. )
M10. Major Course for High School Teachers.-This course includes S10 \({ }^{\text {b }}\) below and allied work selected by the student, with the approval of the instructor. Term papers and other assignments will center around the problems of the general methods of teaching and administration of the high school curricula. Schedule to be arranged. 6 s.h. \(I, I I-C^{*}, G\).

Mr. Troth and Others
(Class enrollment limited to 15. )
S9. Statistical Methods in Education.-A course intended to familiarize teacher, supervisor, and administrator with the statistical method of treating educational and social data, so as to enable them to interpret and use the results of recent investigation in the science of education. Text-books, special assignments, and reports. \(D, I .3\) s.h.-C*, \(G\).

Mr. Dimmitt
S11. Introduction to a Philosophy of Democratic Education.-A study of fundamental concepts underlying secondary and collegiate educational theory as applied to the preparation of socially efficient citizens for a democracy. Textbooks and discussions. B, I. 3 s.h.- \(C^{*}, G\).

Mr. Stowe

\footnotetext{
\(\dagger\) For explanation of \(1, I I, C^{*}, G\), see "Explanations and Abbreviations" on preceding page
}

S13 \(3^{\circ}\). City School Administration.-A study of the organization and administration of city school systems, including administrative phases of supervision. Students enrolled in this course will be expected to place special emphasis upon that phase of school administration in which they are engaged or are most interested. \(A, I I .3\) s.h.-C*, G. Mr. Proctor

S15 \({ }^{\text {b }}\). Principles of Vocational Guidance.-A study of the objectives and underlying principles of vocational education, emphasizing this phase of education in North Carolina and the South. The study seeks to formulate a working program for vocational counsellors and others whose teaching function will involve problems of vocational and educational guidance. Prerequisite: six semester-hours in educational sociology, preferably courses 5 and \(15^{*} . B, I I .3\) s.h.- \(C^{*}, G\). Mr. Childs

S15 \({ }^{\text {d }}\). Sociological Study of Elementary Education.-A study of social and economic forces as affecting elementary education. \(B, I .3\) s.h.-C*, \(G\).

Mr. Ellis
S15 \({ }^{\circ}\). Principles of Vocational Education.-A study of the social basis for vocational education; a brief review of the developments in the field up to the present time; an examination of the present practices in the main fields of agricultural, commercial, industrial, and home-making vocational education. \(D, I I .3\) s.h. \(-C^{*}, G\).

Mr. Childs.
S28. The Psychology of Learning.-A study of different types of learning. principles which underlie successful guidance of learning, methods and conditions of learning, individual differences, etc. Constant reference to experimental literature. \(B, I .3\) s.h.-C*, \(G\). Mr. Dimmitt

S29. Problems and Theories of College Education.-An intensive study of important problems confronting American colleges, of efforts being made to solve the problems studied, and of theories of college education underlying those efforts. Lectures, readings, research, and paper embodying results of research study. Open only to graduate students who have taught or who are preparing to teach in college. \(A, I .3\) s.h.-G.
(Class enrollment limited to 20.)
Mr. Stowe
S30. Methods of Research in Education.-This course is designed for those students who are engaged in or contemplate writing theses in the field of education. It deals with the procedures and criteria for setting up and carrying through sound experiments in education. It also considers those types of research where reflective thinking and documentary evidence are the dominant factors. \(D, I .3\) s.h. \(-G\).

Mr. Holton, Mr. Proctor, and Others
S30X. Thesis Course.-Students desirous of obtaining residence credit toward a thesis in Education are expected to enroll in this course and report regularly upon their problem for discussion and criticism. No student can enroll who is carrying more than three semester-hours of other work. D,II-Residence credit only.

S32. Supervision of Elementary School Subjects.-A course planned to meet the needs of school principals, teachers, and others interested in classroom supervision. Objectives and approved methods in the elementary school subjects. Weekly papers, group conferences, and class discussions. B,I, II. 3 s.h.-C*, G. Mr. Carr (first term) Mr. Ellis (second term)

S40. Research in the Organization and Administration of Health Education.A graduate course for principals and superintendents, consisting of research in the principles, objectives, and methods to be followed in the organization of health education into the school program. Lectures and discussions of various phases of school, community, and personal hygiene, with special readings and preparation of papers. \(D, I\). \(\mathbf{3}\) s.h. \(-C^{*}\), \(G\).

Mr. H. S. Curtis
S43. State and County School Administration.-A study of state and county organization of public schools, emphasizing underlying principles. \(A, I .3\) s. h. \(-C^{*}, G\).

Mr. Proctor

\section*{COURSES PRIMARILY FOR HIGH SCHOOL TEACHERS}
(High school teachers are advised to elect also such courses listed above as S9, S11, S15 \({ }^{\text {b }}, \mathrm{S} 15^{\mathrm{d}}, \mathrm{S} 15^{\text {e }}\), and S28.)

S6f. Social Principles of Secondary Education.-Through a study of the social phases of modern democratic life the course aims to discover principles. points of view, ideals, interests, and methods of procedure of service to secondary school and college teachers and administrators interested in meeting the social and cultural needs of their students. Textbook study, readings, discussions, research, and paper incorporating results of research study. Open only to graduate students, or to seniors who have taught in secondary school. B, M. 3 s.h.-C*, G. Mr. Stowe

Sos. Problems of Secondary Education: Extra-Curricular Activities, Use of Library, Vecational Guidance.-A course dealing with the problems of educating the child through his activities and of helping him find his place in socicty; also with the problems arising in the personal relationships of high school pupils with teacher and principal and with fellow students. \(D, I .3\) s. h. \(-C^{*}\). Mr. Johnston

S10 \({ }^{\text {b }}\). General Methods for Secondary Schools.-Class-room management and discipline; the teacher's use of the question; the project and how to organize it ; the socialized recitation; supervised study; etc. No student is permitted to enroll in this course who has taken course \(S^{2} \mathbf{S 6}^{\text {b }}\), and every student enrolling must present at least twelve semester-hours of work in education and psychology. \(D, I, I I .3\) s. h.-C*, G. Mr. Troth

S10 \({ }^{c}\). Problems in High School and Junior College Teaching.-A brief study of the purposes and objectives of secondary education, followed by assignments in which each member of the class endeavors to organize some secondary subject in the light of desirable results in the lives of
pupils. Lectures, readings, discussions. Open only to students who have taught in high school or junior college. \(A, I I .3\) s. h.-C*, G. Mr. Stowe (Class enrollment limited to 25.)

S16. High School Administration and Supervision.-A study of outstanding problems. Special investigations and reports. \(B, I, I I .3\) s.h.-C*, \(G\).

Mr. Troth
S18 . Analysis of Study and Study Habits, in the High School Subjects.College freshmen not infrequently fail because they do not know how to study. This course, for high school teachers, consists of a brief survey of the available literature of study, followed by case-work in the habits of ligh school and undergraduate college students, and a survey of the peculiar learning problems presented by typical secondary school subjects. \(A, I .3\) s. h.-C*.

Mr. K. R. Curtis

\section*{COURSES PRIMARILY FOR GRAMMAR-GRADE AND PRIMARY TEACHERS}
(These courses are for teachers with two or more years of standard college training. Teachers with less training are advised to take the courses listed under title "North Carolina 'Uniform Curricula' for Elementary Teachers." Primary and grammar-grade teachers who meet prerequisites are advised to consider some work from the courses listed "Primarily for Superintendents, Principals, and Supervisors," and to consider also such subject-matter or cultural courses as Bible \(\mathrm{Sl}^{\mathrm{a}}, \mathrm{Sl}^{\mathrm{b}}\);
 History S9ㄹ, S9 \({ }^{\text {b }}\); and Psychology S1.)

S2A \({ }^{\text {a }}\). Primary Methods in Language and Reading.-A study of materials and methods in the mother-tongue. Not open for enrollment to students who have had credit for course 23 P or 35 P of the North Carolina "Uniform Curricula." A,I, II. 3 s.b.-C*.

Miss Michaels
S2A \({ }^{\text {b }}\). Children's Literature.-A critical study of literature for primary grades; types of literature; story telling, principles underlying and practice; study of State Course of Study and adopted texts; bibliographies and use of the library. Not open for enrollment to students who have had credit for course English 74P of the North Carolina "Uniform Curricula." D, I. 3 s. h.-C*. Miss Miceaels

S2B \({ }^{\text {a }}\). Grammar-Grade Methods in Language, Composition, and Reading.-A study of materials and methods in the language subjects of grades four to seven. Not open for enrollment to students who have had credit for course 23G of the North Carolina "Uniform Curricula." A, II. 3 s. h.\(C^{*}\).

S2 \({ }^{\text {b }}\). Practical Course in Methods.-A course centering around the practice school; fifty hours of observation, weekly conferences, and term papers required; separate sections for primary and grammar-grade teachers. No student may enroll for credit who has already taken a credit course in observation and practice. Schedule to be arranged by each student and the instructors. 2 s.h., \(I-C^{*}\).

Mr. Carr, Miss Gray, and Miss Jordan

S2 \({ }^{\text {c }}\). The American Elementary School.-(a) The responsibility of the elementary school; (b) relation to the junior and senior high schools; (c) sociological ojectives; (d) curriculum values; and (e) classification of elementary pupils. An attempt throughout the session to determine desirable conduct controls and personality outgrowths as a result of (1) the correct presentation of subject matter and (2) the provision of necessary school situations. \(B, I .3 \mathbf{s . h} .-C^{*}\). Mr. K. R. Curtis

S2 \({ }^{\text {d }}\). The Teaching of Arithmetic.-Elementary psychology of arithmetic, place and value of drill, diagnosis of difficulties, remedial measures, place of arithmetic in the elementary school curriculum, etc. A special section for primary teachers the first term. A,I. 3 s.h.-C.

Mr. Johnston
S2Ad. The Teaching of Primary Numbers.-A special section of S2 \({ }^{\text {d }}\) for primary teachers. A,I. 3 s.h.-C. Miss Sullivan

S2A \({ }^{\circ}\). School Hygiene and Health Education: Primary Section.-This course includes two semester-hours of work in general, personal, and school hygiene, with some instruction in anatomy and physiology; cause, transmission, and prevention of communicable diseases; the more common defects of school children; schoolhouse sanitation; medical inspection; etc. An effort is also made to acquaint the student with the technique of health teaching and gives her source of material and assistance in selection and organization of subject-matter. Not open for enrollment to students who have had \(\mathrm{S}_{2}{ }^{\circ}\) or Physiology 51 X below. \(B, I\). 3 s.h.-C. Miss Dansdill

S2B \({ }^{\circ}\) : Physical Education in the Elementary School.-A study of physical education and health work in the elementary school; methods of organization and activities; lectures, discussions, and reports. In addition to the daily recitation period two evening periods weekly in which games suitable for the elementary program will be taught. B,I. 3 s.h.-C.

Mr. Curtis
S2f. The Teaching of Geography.-This study is intended for elementary supervisors and grammar-grade teachers who have at least two years of standard college training. Economics S 15 or \(\mathrm{S}^{2}\) should accompany or precede this course. Organization of subject matter and fundamental aims in geography teaching will be stressed. In the second term, supplementary work in the teaching of history will be included. \(D, I, I I\). 3 s.h.-C*.

Mr. Hamilton (first term) Mrs. Hawkes (second term)

S2Af. The Teaching of Primary Geography and Nature Study.-A special section of \(\mathrm{S}^{\mathrm{f}}\) for primary teachers. D, \(I .3\) s. h.-C*. Miss Sullivan

S3 \({ }^{\text {a }}\). School Organization and Administration for the Classroom Teacher.School and classroom organization and administration as they arise in the work of the classroom teacher. Not open to teachers who have credit for course 24 X of the "Uniform Curricula." \(D, I .3\) s. h.-C".

Mr. Warren

S7. The Technique of Teaching.-An advanced course in the teaching process; the theory underlying sound technique applied specifically to the work of the elementary school. Open to primary and grammar-grade teachers of superior training and experience. \(D, I, I I .3\) s.h. \(-C^{*}, G\).

Mr. Carr (first term)
Mr. Ellis (second term)
SI2A. Curriculum and Materials of the Primary Grades.-A study of curriculum problems in grades one to three; underlying principles of largeunit teaching; centers of interest around which units of work may develop; criteria for selection; collection and organization of materials; organization of the curriculum around large units; checking the results against objectives and subject-matter requirements; technique of teaching large units, including the place of drill, the program of work, provision for individuality, and the relationship of the various subjects to the units of work. Individual assignments. \(A, I .3\) s.h. \(-C^{*}\).

Miss English
S12B. Curriculum and Materials of the Grammar Grades.-Identical with S12A above, except that illustrative materials are chosen with the child of grades four to seven in mind. B, I. 3 s.h.-C*. Miss English

S34. Problems in Experimental Education.-A study of various educational experiments and experimental schools now under discussion and an analysis of their underlying theories and the general trends of procedure. A, I. 3 s.h. \(-C^{*}\).

Mr. Ellis

\section*{NORTH CAROLINA "UNIFORM CURRICULA" FOR ELEMENTARY TEACHERS}

Since many North Carolina teachers are still planning to raise their certificates under the North Carolina curricula that went into effect in 1924, selected courses from these curricula are indicated below. It will be observed that many of the courses carry credit of 3 semester-hours, extended beyond the smaller units of the original curricula. Teachers who have been following the "Uniform Curricula" should pursue the courses in the order listed.

SELECTED COURSES FROM THE SUMMER SCHOOL UNITS OF THE NORTH CAROLINA "UNIFORM CURRICULA"
English 33X. English Composition.-Identical with English SC2a. 2, I, II. 2 s.h.-C.

Psychology 41X. Child Study.-Included in Psychology S14*. D, I, II. 3 s.h.-C. Mr. Bates (first term) Miss Dunn (second term)
Physiology 5IX. Personal and School Hygiene.-General, personal, and school hygiene with some instruction in anatomy and physiology; cause, transmission, and prevention of communicable diseases; the more common defects of school children ; school-house sanitation; medical inspection; etc. \(A, I .3\) s.h.-C. Miss Dansdill

History 52X. American History, 1828-1865.—Included in History S9 \({ }^{\circ}\). \(D, I, I I .2\) s.h.-C.

Education 55G. The Teaching of Grammar-Grade Arithmetic.-Included in Education S2 \({ }^{\text {d }}\). A, I. 2 s.h.-C.

Education 56P. Primary Numbers and Projects.-Included in Education S2A \({ }^{\mathrm{d}}\). A, I. 2 s.h.-C.

Education 67P. Primary Curriculum.-The aims and objectives of education in the primary grades; subject matter and school activities; study of the State Course of Study; organization of the primary curriculum; the place of projects and child activities as a basis for organization. For primary teachers. Grammar-grade teachers desiring a similar course should take 66 G below. \(A, I\). 3 s.h.-C. Mr. Warren

Education 66G. A Study of Grammar-Grade Curriculum.-The aims and objectives of education in the intermediate and grammar grades; pupil activities and experiences for accomplishing these; organization of the grammar grade curriculum ; etc. The North Carolina State Course of Study will be used in addition to a text-book. For teachers of the grammar grades. Primary teachers desiring similar work should elect 67 P above. \(B, I .3\) s.h.-C.

Mr. Hamilton
Geography 72G. The Teaching of Geography.-Type studies of North America, with major emphasis upon the United States, to bring out and illustrate the fundamental principles of good geography teaching. Observation work required. \(D, I, I I\). 3 s.h.-C.

Mr. Hamilton (first term) Miss Rawl (second term)

Industrial Arts 61P.-Manipulation and work with clay, textiles, wood, paper, food, printing, etc., intended to give the child an acquaintance with the raw products of nature, and the changes made in them so that they may be more usable for food, clothing, shelter, utensils, tools, etc. Each student taking the course must complete a project based upon the work of the grade in which she expects to teach. D,I,II. Professional credit only, 3 points.

Mrs. Alston (first term)
Drawing 72P, 72G.-A study of color theory, design, perspective, representation, illustration, picture study, etc., through the media of charcoal, water colors, crayons, clay, etc., with a large amount of outside assignment for primary and for grammar-grade teachers. Each student taking the course must complete a project based upon the work of the grade in which she expects to teach. B, I, II. Professional credit only, 3 points.

Mrs. Alston (first term)
Education 73P. History Material for Primary Grades.-A study of history materials for primary grades, with methods of presentation, practice in constructing and telling stories suitable for children from biographies, travel, etc. \(B, I I .3\) s.h.-C.

Miss Rawl (second term)

English 74P. Children's Literature.-Included in Education S2A \({ }^{\text {b }}\). \(D, I\). 3 s.h.-C.

Psychology 82X. Educational Psychology.-A study of original nature, individual differences, the learning process, and mental hygiene in their relation to teaching elementary pupils. \(A, I I-C\).

Miss Dunn
Writing 82X.-A course combining practice for skill with a study of the educational theory underlying the teaching of handwriting. Schedule to be arranged. I, II-Professional credit only, half course.

Geography 83X. Economic Geography and Types of Industry.-Identical with Economics S15. A, I, II. 3 s.h.-C.

Mr. Landon
Sociology 91X. Social Problems.-An intensive study of several social problems; crime, pauperism, juvenile delinquency; child labor; charities; race problem; immigration; Americanization. Relation of school and teacher to these problems. \(B, I, I I .3\) s.h.-C. Mr. Ormond

Music 92X. Elements of Music and Musical Appreciation.-A continuation of Music 51X. A, I, II-Professional credit only, 3 points.

History 94X. Citizenship.-Identical with Government \(\mathrm{S}^{\mathrm{a}} . \mathrm{D}, \mathrm{I}, \mathrm{II}\).
English 96G. English Literature.-This course is included in English SL1. D, I, II. 3 s.h.-C.

Education 98G. Grammar-Grade Methods in Geography and History.-The fundamental purposes in the teaching of geography and history; aims and values; type lessons and organizing subject-matter. \(D, I I .3\) s.h.\(C\).

Mrs. Hawkes

\section*{BIBLICAL LITERATURE}

S1 \({ }^{\text {a }}\). Old Testament History and Literature.-This will include a general survey of the Old Testament. A, II. 3 s.h.-C. Mr. Cannon
\(\mathbf{S l}^{\text {b }}\). New Testament Background and Literature.-The preparation for Christianity by the Hebrew prophets and intertestamental development: a survey of the New Testament. \(B, I I .3\) s.h.-C. Mr. Cannon

\section*{BIOLOGY}
[S21 \({ }^{\text {a }}\) and \(\mathrm{S} 21^{\mathrm{b}}\) below when completed constitute one of the science courses required for graduation. They should be taken together.]

Botany S21a. Introductory Botany.-Equivalent to Botany 1 of the regular term. A general course dealing with plants. Class conferences daily, 1; laboratory daily, 2, 3. I. 4 s.h.-C.

Mr. Avery and Mr. - (first term)
Mr. Jenkins (second term)

Zoölogy S21 \({ }^{\text {b }}\). General Zoölogy.-Identical with Zoölogy 1 of the regular term. An elementary survey of the animal kingdom. Lecture and quiz daily, 4; laboratory daily, 2:30-4:30. 1, II. 4 s.h.-C.

> Mr. Cunningham and Mr.

Botany S4. Plant Physiology.-Laboratory and lectures. Prerequisite, Botany or Zoölogy S21. Lectures daily, 4; laboratory daily, 2:30. I. 3 s.h.-C* \({ }^{*}\).

Mr. Avery
Zoölogy S19. Research.-Students, who in the judgment of the department are prepared, may carry on investigation of a problem during the summer, and credit will be arranged according to the work done, three hours of laboratory work counting one hour credit. \(I, I I-G\).

Mr. Cunningham
Zoölogy S27. Endocrinology.-A study of the structure, physiology, and embryology of the endocrine glands. Students desiring laboratory work in this course should register for \(S 19.1, I .2\) s.h.- \(C^{*}, G\).

Mr. Cunningham

\section*{CHEMISTRY}

S1. General Inorganic Chemistry.-Lectures, recitations, and laboratory work on the elementary principles of chemistry and on the occurrence, preparation, properties, and uses of the elements and their compounds. 8 s.h. Lectures daily, 1; recitation daily, 4; laboratory hours to be arranged, \(I I-C . \quad\) Mr. R. N. Wilson and Mr. Metler

S2. Qualitative Analysis.-A development of the fundamentals of the ionic theory as applied to analytical reactions with special consideration of the application of the laws of chemical equilibrium and of the modern theories of solution. Lecture or quiz daily, 10:15; laboratory daily, 2:30 to 5:30. I. 4 s.h.-C.

Mr. Saylor
S3. Quantitative Analysis.-The classroom work includes the general theory of quantitative separations, the calculation of results, and the solution of problems. The laboratory work aims to develop technique and to familiarize the student with representative quantitative methods. Lecture or quiz daily, 10:15; laboratory daily, 2:30 to 5:30. II. 4 s.h.C.

Mr. Vosburgh
S5 \({ }^{\text {a }}\). Organic Chemistry.-An introduction to the study of the compounds of carbon. Courses 2 and 3 are prerequisite except in special cases. Lecture 1; laboratory every other day beginning Tuesday afternoon, June 10, 2:30-5:30; quiz every other day beginning Wednesday, June 11, third period: I. 4 s.h.-C. Mr. Hauser and Mr. Gillaspie

S5 \({ }^{\text {b }}\). Organic Chemistry.-A more detailed study is made of subjects such as steroisomerism, substitution in the benzene ring, diazo reactions, etc. Course \(\mathrm{S}^{a}\) prerequisite. Lectures, laboratory, and quizzes as in S5a. II. 4 s.h.-C.

Mr. Hauser

\section*{ECONOMICS AND GOVERNMENT}

S1 \({ }^{\text {a }}\). Principles of Economics.-A short course in the essential principles of economic science. Students who complete this course satisfactorily may be admitted to Economics 4 and 5 during the college year 1930-31. \(B, I .3\) s. h.-C.

Mr. Cotton
SI \({ }^{\text {b }}\). Economic Problems.-A continuation of \(\mathrm{Sl}^{\mathrm{a}}\), involving the study of problems. \(B, I I .3\) s. h.-C. Mr. Hoover

S2*. Elementary Survey of American Government and Politics.-A study of the organization, growth, and practical working of national, state, and local government in the United States; background course for the work of teachers of citizenship in the public schools. \(D, I, I I .3\) s. h.-C.

Mr. R. R. Wilson (first term)
Mr. R. S. Rankin (second term)
S7. Accounting.-Elementary principles of single proprietorship, partnership, and corporation accounting. Supervised laboratory periods. \(A, B, D, I .6\) s.h.-C.

Mr. Shields
S8 \({ }^{\text {a }}\). American Constitutional Law and Theory.-Attention is given to leading constitutional principles of American government, as developed through judicial interpretation. Emphasis is placed upon problems of current importance. Lectures, reading of cases, assigned legal problems. \(B, I .3\) s.h.-C*,.\(C^{*}\) Mr. R. R. Wilson

S \(9^{\text {D }}\). City and County Government.-A study of the general problems of city government in the United States. The latter part of the course is devoted to a study of county government in the United States, with particular reference to North Carolina. B, II, 3 s. h.-C*, G.

Mr. R. S. Rankin
S14. Economic Functions of the State.-A consideration of the primary and secondary economic functions of government and of the legislation which provides for the performance of these functions, such as social legislation and the regulation of commerce and industry. \(A, I I .3\) s. h.\(C^{*}, G\).

Mr. Hoover
S15. Economic Geography and Industrial Organization.-A course based upon the principles of geography and intended to explain how man's industries are determined by his environment. An intensive study of major industries in the United States; the economics of such industries as agriculture, mining, manufacturing, transportation, and banking emphasized. Students may select a specific industry for collateral readings and term papers. \(A, I, I I .3\) s.h.-C. Mr. Landon

S54 \({ }^{\text {b }}\). Industrial Relations.-This course deals with the fundamental principles underlying industrial relations. Policies and plans of the management concerning employees are discussed. The class will study the organization of the labor department of various institutions. \(A, I\). 3 s. b.-C*, G.

Mr. Cotron

\section*{ENGINEERING}
C.E.S. 10. Plane Surveying.-Exercises in use of chain, tape, compass, level, transit, and plane-table; surveys and re-surveys. Three weeks, eight hours a day, beginning May 31. 3 s.h.-C.

Mr. Hall

\section*{ENGLISH}
\(\mathrm{SCl}^{2}\). English Composition.-A course in the fundamentals of English composition, oral and written. When taken in combination with SC1 \({ }^{\text {b }}\) below, it gives credit for required work in freshman English composition. \(3, I-C\).

Mr. Ward
SC1 \({ }^{\text {b }}\). English Composition.-A thorough review of the fundamentals of English grammar with special attention to sentence structure, syntax, common errors, etc. Frequent themes. 1, \(I-C\).

Mr. Ward
SLI. English Poetry.-The principles of English versification and a general survey of English poetry. D, I, II. 3 s.h.-C.

Mr. A. C. Jordan (first term) Mr. Peterson (second term)

SC2 \({ }^{\text {a }}\). English Composition.-By means of instruction. frequent conferences, and extensive writing of assignments this course undertakes to make the student familiar with the qualities of the best prose style. Open only to those who have credit for \(\mathrm{SCl}^{*}\) and \(\mathrm{SCl}^{\text {b }}\). 2, \(I, I I-C\).

Mr. A. C. Jordan (first term)
Mr. Peterson (second term)
SC2 \({ }^{\text {b }}\).English Composition.-Continuation of SC2a; emphasis upon extensive writing in exposition and narration. When completed in combination with SC2", this course completes required work in English composition. \(3, I, I I-C\).

Mr. A. C. Jordan (first term) Mr. Peterson (second term)

SL2". Prose Literature.-Reading and study of selected works of the best writers of prose; lectures on the lives of the authors studied; the periods of literary history; origin and growth of the various types of prose literature, with emphasis upon the novel. With SL2 \({ }^{\text {b }}\) below this course constitutes the regular sophomore course in English literature. SL2 \({ }^{\text {a }}\) and SL2 \({ }^{\text {b }}\) do not meet the requirements for sophomore English unless a student has credit for sophomore composition or has so creditable a record on freshman composition as to be excused by the English Department from Composition 2. D, I. 3 s.h.-C. Mr. Ward

SL2 \({ }^{\text {b }}\). Prose Literature (Continued).-A continuation of English SL2 \({ }^{\text {a }}\), with emphasis upon biography. Students may enter SL2 \({ }^{\text {b }}\) without having had SL2, but may not count it toward a degree until SL2 \({ }^{\text {a }}\) has been completed. D, II. 3 s.h.-C.

Mr. Mitchell

S3 \({ }^{2}\). Shakespeare's Comedies. \(-A, I I .3\) s.h. \(-C^{*}\).
Mr. Mitchell
S5. English Literature, 1798-1832. -This course consists of the study of representative poets of the Romantic Period. \(I, B .3\) s.h. \(-C^{*}, G\).

Mr. Reed
S5 \({ }^{\circ}\). Prose of the Early Nineteenth Century.-A survey of the chief prose writers of the early nineteenth century with special attention to Lamb, Coleridge, Hazlitt, De Quincey, and the reviewers. A, II. 3 s.h.\(C^{*}, G\).

Mr. Mitchell
S6 \({ }^{\text {a }}\). Chaucer. \(-B, I I .3\) s.h. \(-C^{*}, G\).
Mr. Hunter
S19 \({ }^{\text {d }}\) Contemporary Poetry.—B, II. 3 s.h.-C*. Mr. Chase
S29․ The Elizabethan Period.-This course consists of a study of nondramatic Elizabethan literature. I, D. 3 s.h.-C*, G.

Mr. Reed
\(\mathbf{S 3 0}{ }^{\text {c }}\). Studies in Victorian Literature: Matthew Arnold.-An intensive study of the prose and poetry of Matthew Arnold. A,I. 3 s.h.-C*, \(G\).

Mr. Greene
S30 \({ }^{\text {d }}\). Studies in Victorian Literature: The Novelists.-A study of social, political, and industrial conditions as revealed in the work of the chief novelists of the Victorian period. B, I. 3 s.h.-C*, G. Mr. Greene

S104. The Development of the American Short Story.-D, II. 3 s.h.-C*. Mr. Hunter

S304. Seminar in Poe's Contemporaries.-D, \(I I .3\) s.h.-G. Mr. Chase (Class enrollment limited to 15 .)

Note.-English S19 \({ }^{\text {d }}\) and S304 are listed tentatively. If both are offered, \(\mathrm{S5}^{\circ}\) will be withdrawn. If both are withdrawn, \(\mathrm{S}^{a}\) will also be withdrawn and \(S 5^{\circ}\) offered.

\section*{FRENCH}

S2‥ Second-Year French.-Reading and translation, alternate exercises in grammar review, verb drill, and writing in French at dictation. B, I. 3 s.h.-C. Mr. B. R. Jordan

S2 \({ }^{\text {b }}\). Second-Year French.-Reading and translation, with prose composition. D, I. 3 s.h.-C. Mr. Walton

S211. Survey of Modern French Drama.-A, I. 3 s.h.-C*, \(G\).
Mr. B. R. Jordan
S217. Seminar in Balzac. \(-D, I I .3\) s.h. \(-C^{*}, G . \quad\) Mr. Michell (Class enrollment limited to 15. )

S221. Contemporary Drama.- \(A, I I .3\) s.h. \(-C^{*}, G . \quad\) Mr. Michell
S222. Nineteenth Century French Poetry.-The transition from Romanticism to Parnassianism and Symbolism. B, I. 3 s.h. \(-C^{*}, G\).

Mr. Walton

\section*{GERMAN}

S1 \({ }^{\text {a }}\). Elementary German.-Grammar, with composition, simple reading, and spoken German. \(A, D, I\) (first three weeks). 3 s.h.-C. Mr. F. E. Wilson

SI \({ }^{\text {b }}\). Elementary German.-Grammar, reading, and translation- \(A, D, I\) (second three weeks). 3 s.h.-C. Mr. F. E. Wilson
[Auditors desiring to attend \(\mathrm{Sl}^{\mathrm{a}}\) and \(\mathrm{Sl}^{\mathrm{b}}\) without taking credit are not required to pay full registration and tuition but are subject to the auditor's fee of ten dollars.]

S2 \({ }^{\text {a }}\). Second-Year German.-Reading and translation of easy German prose, lyrics, and ballads, with a systematic review of grammar and composition exercises based on the selections read. \(A, I I .3\) s.h.-C.

Mr. Krummel
\(\mathbf{S 2}{ }^{\text {b }}\). Second-Year German.-Reading and translation of narrative prose, a modern prose comedy, and one of Schiller's blank verse dramas. \(D, I I\). 3 s.h.-C. Mr. Krummel

\section*{HISTORY}

S \(\mathbf{9}^{\text {a }}\). American History to 1828 .-A rapid survey of the Colonial and Revolutionary periods followed by a more intensive study of the National period down to the beginning of Jackson's administration. \(B, I, I I\). 3 s.h.—C. Mr. Smith (second term)

S \(9^{\text {b }}\). American History, 1828-1865.-A study of national expansion, sectional rivalry, railway extension, slavery, political parties, international relations, and the Civil War. D, I, II. 3 s.h.-C.

Mr. Harmon (first term)
Mr. Smith (second term)
S206. The Ante-Bellum South.-This course deals primarily with political and economic conditions, including the development of democracy from the Revolutionary through the Jacksonian Era, the transformation from the frontier to the plantation régime, and the growth of sectionalism. \(D, I .3\) s.h.-C*, \(G\).

Mr. Abernethy
S222. Renaissance and Reformation.-A course consisting of lectures, reports, and a term paper. It will cover more intensively the history of Europe between 1500 and 1648. B, II. 3 s.h.-C*, G. Mr. Eells

S315. Seminar in Southern History Prior to 1860.-This is primarily a research course. Topics are assigned on various phases of the subject with the object of tracing the expansion of nationalism and democracy, particularly in the Revolutionary Period. B, I. 3 s.h. \(-G\).

Mr. Abernethy

S322. Seminar in Early Modern History.-A seminar course, open only by permission of the instructor. It will emphasize the Renaissance in Italy and Northern Europe. Research by students and class discussions. \(D, I I .3\) s.h.-G.

Mr. Eells

\section*{LATIN AND ROMAN STUDIES}

S215. Roman History.-From the earliest times to the reign of Constantine. Political, social, and religious institutions; the Hellenic infusion and oriental influences; the foundation of the imperial system and its decline; significance of Latin literature. A reading knowledge of Latin, including the preparation equivalent to at least twelve semester-hours of college Latin is prerequisite. Lectures and reports. A, I. 3 s. h.\(C^{*}, G\).

\author{
Mr. Anderson
}

S216. Latin Syntax.-Study of the fundamental problems in the development and use of the cases, tenses, and modes. Brief introduction dealing with the origin and development of studies in syntax. \(B, I\). 3 s. h. \(-C^{*}, G\).

Mr. Anderson

\section*{MATHEMATICS}

SI \({ }^{2}\). College Algebra.-This course will cover the following topics: review of elementary algebra, quadratic equations, properties of quadratics, progressions, variation, logarithms, mathematical induction, binominal theorem, functions, theory of equations, permutations and combinations, determinants. \(A, I\). 3 s.h.-C.

Mr. Miles
S2․ Plane and Spherical Trigonometry.-Trigonometrical formulas; solution of special problems. B, I. 3 s.h.-C. Mr. Elliott
\(\mathbf{S} \mathbf{2}^{\text {b }}\). Analytic Geometry.-The definitions, equations, and properties of the straight line and conic sections in rectangular coördinates; parametric equations of loci, tangents, normals, etc., and transformations of coordinates; the general equation of the second degree. \(A, I I\). 3 s.h. \(-C^{*}\).

Mr. Patterson
S3 \({ }^{\text {a }}\). Differential Calculus.-D, I. 3 s.h.- \(C^{*}\).
Mr. W. W. Rankin
S \({ }^{\text {b }}\). Integral Calculus. \(-D, I I .3\) s.h. \(-C^{*}\).
Mr. Patterson
S4. Theory of Equations and Determinants.-B, \(I I .3\) s.h.-C*, \(G\). Mr. Miles

S6. Differential Equations.-A study of the more common types of ordinary differential equations with emphasis on geometrical interpretations and applications to geometry and physics. Prerequisite, course S3. \(D, I .3\) s.h.-C*, \(G\).

Mr. Miles
S250. Modern Geometry.-Modern geometry of the triangle, transversals, harmonic sections, harmonic properties of the circle, inversions, poles, polars, etc. Valuable to teachers of high school geometry. Prerequisite, courses \(2,3^{\text {a }} . ~ B, I . ~ 3\) s.h.-C \(C^{*}, G\).

Mr. W. W. Rankin

S15. Probability, Introductory Course.-Combinatory analysis, mean values, Bernoulli's theorem, the probability integral, statistics. This course should be preceded by Mathematics \(3^{\text {b }} . A, I I .3\) s.h.-C*, \(G\).

Mr. Miles
S25‥ Integral Equations.-A study of the Volterra and Fredholm integral equations with special reference to their application to the boundary value problem of differential equations. Prerequisite, course 5. \(A, I\). 3 s.h. \(-G\).

Mr. Elliott
S25 \({ }^{\text {b }}\). Integral Equations (Continued).-Schedule to be arranged for the first three weeks of the second term. 3 s.h.-G. Mr. Elliott

\section*{PHYSICS}

SI. Preliminary Physics.-Lectures, recitations and individual laboratory work covering the fundamental phenomena of physics, a course substantially equivalent to the Physics 1 of the winter term. Two lectures, one recitation, and one laboratory period daily. \(I\); schedule to be arranged. 8 s.h.-C. Mr. Hatley, Mr. Callihan, and Mr. Stephens

\section*{PSYCHOLOGY}

S1. Introduction to General Psychology: General Principles.-Lectures, demonstrations, prescribed readings, and reports. \(B, I .3\) s.h. \(-C\).

Mr. Bates
S10. Social Psychology.-Lectures, readings, and reports. B, 3 s.h. \(-C^{*}, G\).

Mr. Estabrooks
S14 \({ }^{\text {a }}\). Child Psychology.—The outstanding characteristics of children of the primary and grammar-school ages; a course intended primarily for primary and grammar-grade teachers. Text-book; discussions, and exercises. \(D, I .3\) s.h.-C.

Mr. Bates
S14. General Psychology for Teachers.-A study of original nature, individual differences, the learning process, etc.; a survey of the principles of general psychology peculiarly applicable to the work of the teacher. \(A, I\).

Mr. Bates
S19. Genetic Psychology.-A study of the behavior and mental processes of the child from the comparative and developmental points of view. Lectures, assigned reading, reports. D, I. 3 s.h.-C*, \(G\).

Mr. Estabrooks

\section*{RELIGION: CHURCH HISTORY}

SR2 \({ }^{\text {D }}\). Rise of the Denominations.-Beginning with the Lutheran Reformation, this course traces the rise, growth, influence, and history to 1800 of the Calvinistic, Anglican, Reformed, Quaker, Baptist, and Methodist movements. \(A, I .3\) s. h. \(-C^{*}, G\).

Mr. Garber

SR4 \({ }^{\text {a }}\). Methodism.-A study of the beginnings and growth of the Methodist societies in England, of early Methodism in America, and of the development of the several branches of the Methodist Church in America. Prerequisite, Church History SR2. B, I. 3 s. h.-C \(C^{*}, G\).

Mr. Garber

\section*{RELIGIOUS EDUCATION}

S2 \({ }^{\text {a }}\). Curriculum of Religious Education.-Study of various theories of the curriculum of religious education, conception of the curriculum as enriched and controlled experience, analysis of existing curricula and critical evaluation of same. Prerequisite: at least twelve semester-hours of education or religious education. B,I. 3 s.h.-C*, G. Mr. Spence.
\(\mathbf{S 3}{ }^{\text {b }}\). Materials of Character Education.-A study of the Bible and other great religious literature for their contributions to character formation at each given stage of development. Special emphasis on story material and modern religious poetry. Prerequisite: at least twelve semesterhours of education or religious education. \(D, I .3\) s.h. \(-C^{*}, G\).

Mr. Spence

\section*{SPANISH}

S1 \({ }^{\text {a }}\). Elementary Spanish.-Pronunciation, grammar, conversation, and reading of easy prose. \(B, I .3\) s.h.-C.

Mr. Steinhauser
Sl \({ }^{\text {b }}\). Elementary Spanish.-Pronunciation, grammar, conversation, and reading of easy prose. \(D, I .3\) s.h.-C. Mr. Steinhauser
\(\mathbf{S} 2^{\text {a }}\). Second-Year Spanish.-Thorough review of grammar, with exercises in composition, conversation, and dictation. \(A, 11.3\) s.h.-C.

Mr. Lister
\(\mathbf{S}{ }^{\text {b }}\). Second-Year Spanish.-Reading and translation; exercises in conversation and dictation. \(D, I I .3\) s. h. \(-C\).

Mr. Lister

\section*{JUNALUSKA SUMMER SCHOOL, Inc.}
(Affiliated with Duke University)
Lake Junaluska, N. C.
INSTRUCTORS
BENJAMIN GUY CHILDS,
(Duke University),
A.B., A.M., University of Virginia; University of Virginia, 1920.22;

Director
Education, Sociology.
HUGO LEANDER BLOMQUIST, (Duke University),
B.S., The University of Chicago; Pasteur Institute, 1919;

Ph.D., University of Chicago;
Biology and Hygiene
WILLIAM IVEY CRANFORD, (Duke University), A.B., Duke; Ph.D., Yale;

Psychology.
ROBERT TAYLOE DUNSTAN, (Greensboro College for Women), A.B., Duke; A.M., Ph.D., University of Wisconsin; Spanish.

BELLE CURRIN GHOLSON, (Durham High School), A.B., A.M., Duke; Education.

QUINTON HOLTON, (Head of Department of History, Durham High School), A.B., Duke; The University of Chicago, 1921-23; History.

ALLISON W. HONEYCUTT, (Superintendent Hendersonville City Schools),
A.B., Wake Forest; Graduate Study, Columbia University; Education.

EDWIN RAY HUNTER, (Maryville College),
A.B., Maryville College; M.A., Ph.D., The University of Chicago; English.

\section*{WILLIAM CHARLES McCALL, \\ (University of South Carolina),}
A.B., A.MI., University of South Carolina; The University of Chicago, 1926-27; Education.

EDNA MORGENTHALER (Elementary Supervisor, High Point City Schools), A.B., University of Nebraska; A.M., Columbia; Primary Education.

HIRAM EARL MYERS, (Duke University), A.B., Duke; S.T.B., S.T.M., Boston University; Biblical Literature.

WILLIAM AMOS ABRAMS, (Glen Alpine High School), A.B., A.M., Duke;

Enclish.
WILBERT ARMONDE JENKINS,
(Fellow in Biology, Cornell University), A.B., A.M., Duke; Assistant in Biology.

William leroy MacGowan, (Head Department of Biology, Robert E. Lec Senior High School, Jacksonzille, Fla.),
A.B., Harvard University;

Assistant in Biology.
ISABEL MARTIN, (East Tennessee Teachers College), A.B., Duke;

Education and Drawing.
ROSA WARREN MYERS,
Southern Conservatory of Music; American Conservatory of Music; Public School Music.

ELMER WILLIAMS SYDNOR,
(Carson-Nezoman College),
A.B., The University of Richmond; A.M.. Columbia University; Duke University, 1929-30;

English.

\section*{BUSINESS MANAGER}

JAMES R. BOYD,
Waynesville, North Carolina.

\section*{CALENDAR}

The Junaluska Summer School, Inc., will open June 10 and will close July 19. Recitations will be held five days in the week, all Mondays except June 30 and July 14 being holidays. Friday, July 4, will be observed as Independence Day.

\section*{REGISTRATION}

Saturday, June 7, is reserved for the registration of students from Haywood County. Tuesday, June 10, is registration day for all other students. This day, between the hours of 9 A.M. and 5 P.M., will be allowed for students to matriculate, select courses, and make arrangements concerning board and lodging. Regular classes will meet at \(8: 15\), Wednesday morning, and recitation work will begin at once. Students are advised against late entrance since this very seriously affects school work as well as credits that may be obtained.

\section*{ADMISSION}

All applicants for admission must have completed a high school course. As evidence of this, a teacher's certificate of grade as high as North Carolina State elementary will be accepted from teachers with two or more years of experience. Certificates of high school graduation and other credentials should be submitted to the Director at the time of registration.

\section*{COURSES OFFERED}

Professional courses are offered for teachers in elementary schools, teachers of primary grades and of grammar grades, and teachers of high school subjects.

For qualified college students, including high school graduates who may wish to begin their college course in the summer instead of waiting until September, instruction will be offered in economics, education, English, Biblical literature, biology, history, Spanish, psychology, and sociology. Credit is allowed toward the A.B. degree at Duke University for these courses, and credit towards the A.M. degree is allowed for the course in field botany. Professional credit towards the raising or renewal of a North Carolina teacher's certificate will be allowed for the successful completion of courses in drawing and physical education.

\section*{COURSE IN FIELD BOTANY}

A special course in field botany will be offered to public school teachers of nature study, high school teachers of botany and biology, and to qualified college students. The course is unique in that it will consist of a careful survey of the plant life found in the mountains of western North Carolina. Frequent excursions and field trips will be made to Mount Mitchell, Mount Pisgah, the famous Pink Beds, and other sections abundant in unusual flora. A considerable amount of time will be spent in the new Great Smoky Mountain National Park area.

High school teachers and elementary school teachers of botany and related subjects will find ample opportunity for extensive study in this attractive field with either undergraduate or graduate credit.

\section*{ROOM AND BOARD}

The hotels and lodging places on the Southern Assembly Grounds at Lake Junaluska have guaranteed summer school students board and room at the special rate of \(\$ 10.00\) per week, with bed-linen furnished. Room and board will be provided at the same rate in the Mission Building, the Summer School headquarters, for a limited number of early applicants. Further information relative to board and room may be obtained by addressing J. R. Boyd, Business Manager, Waynesville, North Carolina, or R. E. Nollner, The Southern Assembly, Lake Junaluska, N. C.

\section*{FEES AND EXPENSES}

Tuition charge for college students other than teachers is \(\$ 10.00\). Teachers are exempt from tuition. The registration fee, paid by every student, is \(\$ 20.00\). Expenses may therefore be estimated as follows:
\[
\text { Registration .......................................................... } \$ 20.00
\]

Room and Board.................................................. 60.00
Library and Recreation...................................... 2.00
\(\$ 82.00\)
To this should be added about \(\$ 5.00\) for books and probably \(\$ 5.00\) for miscellaneous expenses, besides the tuition charge for students other than teachers. A laboratory fee of \(\$ 2.50\) will be charged students taking courses in biology.

\title{
COURSES OF INSTRUCTION*
}

\section*{EDUCATION}

S2 \({ }^{\text {c }}\). The American Elementary School.-(a) The responsibility of the elementary school; (b) relation to the junior and senior high schools; (c) sociological objectives; (d) curriculum values; and (e) classification of elementary pupils. An attempt throughout the session to determine desirable conduct controls and personality outgrowths as a result of (1) the correct presentation of subject matter and (2) the provision of necessary school situations. Daily, first period.

\author{
Mr. Honeycutt
}

S2g. General Course in Methods.-This course is intended for elementary teachers. It deals with the theory and practice of the teaching process. Daily, first period.

Miss Morgenthaler
S5. Introduction to Educational Sociology.-Principles of sociology necessary to an understanding of the school as a social institution; a consideration of such topics as social forces, social processes, and social problems; particular emphasis upon the study of the school as a coördinating and correlating agency in society. (Identical with Sociology S5*.) Daily, second period.

Mr. Childs
S6 \({ }^{\text {d }}\). High School Administration and Supervision.-Intended for principals and teachers. The principles of secondary education applied to the solution of practical problems of the high school. Special investigations, readings, and reports. Daily, fourth period.

Mr. Childs
S8 \({ }^{\text {b }}\). Educational Tests and Measurements.-Study of standardized tests and scales with emphasis on their service in the improvement of instruction. Daily, second period.

Mr. McCall
S10 \({ }^{\text {b }}\). General Methods for Secondary Schools.-Class-room management and discipline ; the teacher's use of the question; the project and how to organize it; the socialized recitation; supervised study; etc. Daily, first period.

Mr. McCall
S14. \({ }^{\text {b }}\). Psychology of Adolescence.-Characteristics of children of juniorand senior-high school age; the change of most educational significance in this transition period. Intended for high school teachers. Daily, fifth period.

Mr. Cranford

\section*{NORTH CAROLINA "UNIFORM CURRICULA" FOR ELEMENTARY TEACHERS—SUMMER SCHOOL UNITS 3-5—SELECTED COURSES}

English 33X. English Composition.-The most advanced course in English composition required of elementary teachers; emphasis upon the

\footnotetext{
- All courses carry two semester-hours of college credit unless otherwise indicated.
}
power of the student to collect material and organize ideas and effectively express them in narration, description, and exposition; review of paragraphing, use of words, etc. Daily, second period.

Mr. Abrams
Psychology 4IX. Child Study.-The development of the child in mental, moral and social nature; influence of heredity and environment; meaning of infancy; innate tendencies and capacities; etc. Daily, first period.

Mr. Cranford
History 41X. American History.-A survey of the colonial and revolutionary periods, followed by more intensive study of the early constitutional period. Credit, 3 semester-hours. Daily, first and second periods.

Mr. Holton
Physiology 5IX. Personal and School Hygiene.-General, personal, and school hygiene; cause, transmission, and prevention of communicable diseases; more common defects of school children; etc. Daily, third period.

Mr. Blomquist
History 52X. American History (Continued).-A continuation of 41X. The Jacksonian democracy, national expansion, sectional rivalry, railway extension, slavery, political problems, international relations, and the Civil War. Texts, readings, and reports. Credit, 3 semester-hours. Daily, fourth and fifth periods.

Mr. Holton
Education 56P. Primary Numbers and Projects.—The psychology of arithmetic; development of the number concept in the primary grades; place of drill; projects as a basis for formal number work. Daily, fifth period.

Miss Morgenthaler

IRREGULAR UNIT IN BIOLOGY
(This unit should be taken immediately after Unit 4 or Unit 5.)
Biology 41X (General Biology), 62X (Plants), 73X (Animals). -An introductory course intended as a foundation for the study of psychology, physiology, botany, zoölogy, etc. The treatment of plants attempts two things: (1) through the study of types to acquaint the student with the morphology and physiology and reproduction in plants, from the one cell to seed plants, (2) through field work to acquaint the student with as much common and local flora as possible. This part of the course is intended to serve as a foundation for the teaching of nature study and elementary science. The treatment of the part of the course dealing with animals is similar in aim and method to the treatment of the part dealing with plants. Daily, lecture fourth period; laboratory schedule to be arranged. Credit, 8 semester-hours, constituting a complete unit. Mr. Jenkins and Mr. MacGowan

\section*{SUMMER SCHOOL UNITS 6-9—SELECTED COURSES}

\section*{(Recommended for teachers holding the Elementary A certificate.)}

Education 67P. Primary Curriculum.-The aims and objectives of education in the primary grades; subject matter and school activities necessary to obtain these aims and objectives; study of the State Course of Study; organization of the primary curriculum; the place of projects and child activities. A course for primary teachers. Grammar-grade teachers desiring a similar course should take 66G below. Daily fourth period.

Mr. Honeycutt
Education 66G. A Study of the Grammar Grade Curriculum.-The aims and objectives of education in the intermediate and grammar grades, pupil activities and experiences for accomplishing these, organization of the grammar grade curriculum, etc. The North Carolina State Course of Study will be used in addition to a text-book on the elementary school curriculum. For teachers of the grammar grades. Primary teachers desiring similar work should elect 67P above. Daily, third period. Mr. Honeycutt

Geography 62P. Primary Geography and Nature Study.-The function, aim, and place of geography and nature study in the primary curriculum. Consideration of such content as primitive life and occupations; observational effects of weather changes and climate on nature and life; certain physiographic changes and features which can be observed and appreciated; some acquaintance with the out-of-doors, common birds, butterflies, insects, animals, trees, flowers, etc.; methods of teaching such material. Use will be made of the State Course of Study, text-books in geography and nature study, and professional books on these subjects. Daily, second period. Miss Martin

English 74P. Children's Literature.-A critical study of literature for primary grades; types of literature; Mother Goose, nonsense and fairy tales, fables, myths, legends, nature stories, poetry, etc.; story telling, principles underlying and practice; bibliographies and use of the library. Daily, first period.

Miss Martin
Geography 72G. The Teaching of Geography.-Type studies of North America, with major emphasis upon the United States, to bring out and illustrate the fundamental principles of good geography teaching. Observation work required. Daily, first period. Mrs. Gholson

Drawing 72P. Drawing for Primary Grades.-This course considers the topics introduced in course 31X with special reference to the work of the primary grades. Daily, fifth period. Professional credit only, half course.

Miss Martin
Drawing 72G. Drawing for Grammar Grades.-This course considers the topics introduced in course 31X with special reference to the work of the grammar grades. Daily, fifth period. Professional credit only, half course.

Miss Martin

Educatlon 73P. History Material for Primary Grades.-The aim of this course is to give the student a source of history material for primary grades, together with methods of presentation. Practice will be given in constructing and telling stories suitable for children from biographies, travel, etc. Daily, third period.

Miss Morgenthaler
Psychology 82X. Educational Psychology.-A study of original nature, individual differences, the learning process, and mental hygiene in their relation to teaching the elementary school subjects. Daily, third period. Mr. Cranford

Geography 83X. Types of Industry.-Identical with Economics S15b. A study of the major industries in the United States; the economics of such industries as agriculture, mining, manufacturing, transportation, and banking emphasized. Daily, fourth period.

Mrs. Gholson
Rellglous Education 91X. The Use of the Bible in Public Schools.-A survey of the present situation in Religious Education as related to the public school system, followed by a discussion of various methods of religious instruction, closing with the presentation of practical examples of Biblical material suitable for public school use. Daily, third period.

Mr. Myers
Soclology 91X. Social Problems.-An intensive study of several social problems; crime, pauperism, juvenile delinquency; child labor; feeblemindedness; charities, race problem; immigration; Americanization. Relation of the school and teacher to these problems. Daily, fifth period.

Mr. McCall
History 94X. Citizenship.-A study of the organization, growth, and practical workings of national, state, and local government in the United States. The course is intended to serve as a background for the work of teachers of citizenship courses in the public schools. Daily, second period.

Mrs. Gholson
English 96G. English Poetry.-Identical with SL1. Credit, 3 semesterhours. Daily, fourth and fifth periods.

Mr. Abrams
Muslc 92G. Musical Appreciation for Grammar Grades.-This course will discuss such topics as the need for musical appreciation; sources of the enjoyment of music; rhythm, melody, song; correlation of music with other arts and common school subjects. Daily, third period. Professional credit only, half course.

Mrs. Myers

\section*{BIBLICAL LITERATURE}

SII. Leaders in Early Hebrew History.-The study begins with Moses and continues through the period of the United Kingdom. Daily, second period.

Mr. Myers

Si3. Leaders in Judaism.-This course begins with the Exile and continues to the Roman period, considering the literature and principal characters. Daily, fourth period.

Mr. Myers
(Students who have credit for Bible 1 at Duke University may enter S11, S13, or Religious Education 91X. Students who have not had Bible may be admitted by permission of the instructor to take these three courses as a substitute for Bible 1.)

\section*{BIOLOGY}

S7. Hygiene.-Problems of community and personal hygiene with especial reference to teachers and schools. Daily, third period.

Mr. Blomquist
S21. General Biology.-Daily lectures, laboratory work, and quizzes. A content course for high school teachers as well as one of the science courses required for college graduation. Lectures daily, fourth period. Credit, 8 semester-hours.

Mr. Jenkins and Mr. MacGowan
S25. Field Botany.-The aim of this course is to present to the students a first-hand knowledge of plants in their native habitats. The field work will be done in the mountain areas of Western North Carolina and will include the Pisgah Forest and Smoky Mountain sections. The course will consist of practice in the identification of plants in the field and a study of their natural history and associations. Field trips daily, also lectures, readings, reports, etc. Credit, 4 semester-hours for A.B. or A.M. degree. Hours to be arranged.

Mr. Blomquist

\section*{ENGLISH}

SLI. English Poetry.-The principles of English versification and general survey of English poetry. Identical with 96 G of the "Uniform Curricula." Credit, 3 semester-hours. Daily, fourth and fifth periods.

Mr. Abrams
SC2 \({ }^{2}\). English Composition.-By means of instruction, frequent conference, and extensive writing of assignments this course undertakes to make the student familiar with the qualities of the best prose style. Open only to those who have credit for \(\mathrm{SC1}^{2}\) and \(\mathrm{SC1}^{\mathrm{b}}\), or its equivalent. Daily, second period.

Mr. Abrams
SC2 \({ }^{\text {b }}\). English Composition.-Continuation of \(\mathrm{SC}^{2}\); emphasis upon extensive writing in exposition and narration. When completed in combination with SC2 \({ }^{2}\), this course completes required work in English composition. Daily, first period.

Mr. Abramg
SL2 \({ }^{\text {a }}\). Prose Literature.-Reading and study of selected works of the best writers of prose; lectures on the lives of the authors studied; the periods of literary history; origin and growth of the various types of prose literature, with emphasis upon the novel. Credit, 3 semester-hours. Daily, fourth and fifth periods.

S3 \({ }^{2}\). Shakespeare's Comedies.-Intensive study of two of the comedies and careful reading of others. Credit, 3 semester-hours. Second and third periods.

Mr. Hunter
S4 \({ }^{\circ}\). American Literature for Elementary Teachers.-A selection from the American literature taught in the last three grades of grammar school, and a study of this material and its background. Credit, 3 semesterhours. Daily, first and second periods.

Mr. Sydnor
Sl04. The Development of the American Short Story.-Credit, 3 semesterhours. Fourth and fifth periods.

Mr. Hunter

\section*{HISTORY}

S9 \({ }^{\text {a }}\). American History to 1829.-A survey of the Colonial and Revolutionary periods followed by more intensive study of the Constitutional period down to the beginning of Jackson's administration. A course designed to meet the needs of elementary teachers. Credit, 3 semesterhours. Daily, first and second periods.

Mr. Holton
S \({ }^{\text {b }}\). American History, 1830-1865.—A study of national expansion, sectional rivalry, slavery, political parties, international relations, and the Civil War. Text, lectures, readings, and reports. Credit, 3 semesterhours. Daily, fourth and fifth periods.

Mr. Holton

\section*{PSYCHOLOGY}

S14 \({ }^{2}\). Child Psychology.-The outstanding characteristics of children of the primary and grammar-school ages; their bodily growth and development and its sensitiveness to their environment ; their characteristic ways of knowing, feeling, and acting; and the best methods and materials for stimulating and guiding development. Text-book, discussions, and exercises. Daily, first period. Mr. Cranford

S14 \({ }^{\text {b }}\). Psychology of Adolescence.-The characteristics of the youth of high school age that are of interest and importance to teachers of high school students. This course is intended primarily for them. Text-book, discussions, and exercises. Daily, fifth period.

Mr. Cranford
Sl4 \({ }^{\text {c }}\). General Psychology for Teachers.-A survey of the principles of general psychology that are peculiarly applicable to the practical work of the teacher. Daily, third period. Mr. Cranford

\section*{SOCIOLOGY}

S5 \({ }^{\text {a }}\). Introduction to Educational Sociology.-A study of social forces. processes, and values as affecting education, and the interaction of school and community. Daily, second period.

Mr. Childs
S5 \({ }^{\circ}\). Social Problems.-This course will concern itself with social principles and problems. It will make an intensive study of such problems as dependency, delinquency, and defectiveness; charities and corrections. Daily, fifth period.

Mr. McCall

\section*{SPANISH}

S2 \({ }^{\text {a }}\). Second-Year Spanish.-Thorough review of grammar, with exercises in composition, conversation, and dictation. Credit, 3 semesterhours. Daily, first and second periods.

Mr. Dunstan
\(\mathbf{S} \mathbf{2}^{\text {b }}\). Second-Year Spanish.-Reading and translation; exercises in conversation and dictation. Credit, 3 semester-hours. Daily, second and third periods.

Mr. Dunstan
RESERVATION IN ADVANCE
Students should enroll as promptly as possible. Application for reservation may be made by sending the enclosed application blank properly filled in to B. G. Childs, Director, Duke University, Durham, N. C. A part payment of \(\$ 5.00\) on the registration fee should be enclosed with the application; checks should be made to J. R. Boyd, Business Manager.

\title{
JUNALUSKA SCHOOL OF RELIGION
}

Lake Junaluska, N. C.

INSTRUCTORS
ELBERT RUSSELL, A.B., A.M., Ph.D.
Dean of the School of Religion and Professor of Biblical Interpretation Duke University.

WILLIAM CLAYTON BOWER, A.M. Professor of Religious Education, The University of Chicago.

BENNETT HARVIE BRANSCOMB, A.B., B.A., M.A. (Oxon.), Professor of New Testament, Duke University.

SYLVANUS MILNE DUVALL, AB., Ph.D., Professor of Religious Education, Scarritt College.

FRANKLIN SIMPSON HICKMAN, A.B., A.M., S.T.B., Ph.D.
Professor of the Psychology of Religion and Homiletics, Duke University.

SAMUEL GUY INMAN, A.B., A.M., LL.D.,
Executive Secretary Committee on Coöperation in Latin America, New York.

GILBERT THEODORE ROWE, A.B., D.D., Litt.D.
Professor of Christian Doctrine, Duke University.

\section*{CALENDAR: SCOPE OF WORK}

The third session of the Junaluska School of Religion will be held at Lake Junaluska, North Carolina, from July 21 to August 30, 1930. It will be conducted under the joint management of Duke University and the General Sunday School Board with the coöperation of the Board of Missions and other boards of the Church. The purpose is to conduct a summer
school of religion which shall meet the growing demand for advanced study in the Bible, Theology, Religious Education, Missions, and allied subjects.

There will be two classes of students, those who are graduates of high schools and who may have had one or more years in college, and those who are graduates of colleges. The school is open to men and women. The credits secured for work done will be Duke University credits, and will count toward the A.B. and B.D. degrees and for the preliminary work toward the A.M. degree in the School of Religion.

The School is designed for pastors, church workers, missionaries, and students who desire to fit themselves the better for their work or to add credits looking toward the securing of university degrees.

\section*{COURSES}

Courses will be offered meeting five times a week with eighty-minute periods. Each course, satisfactorily completed, will receive a credit of three semester-hours in Duke University. Two such courses may be taken by each student. The courses offered are divided into two groups. The first group consists of courses for college undergraduates who are graduates of high schools and who desire credits looking toward the A.B. degree. The second group consists of courses for college graduates who desire credits looking toward the B.D. degree. These courses may also be taken by college undergraduates who have completed the junior year and are ranked as incoming seniors in college.

\section*{GROUP I}

Course 1. The Teachings of Jesus.-A study of Jesus' teaching in the light of the religious and ethical ideas of his day.

Professor Branscomb
Course 3. Old Testament History.-A survey of the history of the Hebrews in its relation to contemporary oriental history, with special emphasis on the literature and religious institutions. Professor Russell

Course 5. The Evangelical Movement as a Factor in Social Reconstruction in Latin America.-Survey of present social and religious conditions, the church and the community, religious education program, literature problem, relations between national and foreign workers and between Protestants and Catholics, movements for coöperation and unity.

Professor Inman

\section*{GROUP II}

\section*{FOR COLLEGE GRADUATES (AND FOR COLLEGE SENIORS)}

Course 2. The Religious Ideas of Paul.-Religious and ethical teachings of the Apostle Paul and their significance for the life of today. Special attention is given to the religious and philosophic movements of Paul's day.

Professor Branscomb
Course 4. The Social Teachings of the Old Testament.-A survey oi the social teachings of the Old Testament, with special reference to their value in modern life.

Professor Russell
Course 6. Religious Education in the Modern Church.-The educational function of the church; the objectives of religious education; the church organized for religious education; an adequate leadership; the content and method of religious education; religious education through social participation; the scientific method in religious education; religious education in its relationship to the total educational process; religious education and public education; religious education as a creative process.

Professor Bower
Course 8. Practicum in Religious Education.-The analysis of problems in teaching religion. The course will be based upon the practical experience of the members of the group in the actual conduct of religious education. The process as conducted will be analyzed and criticized. Changes in the direction of improvement will be projected in terms of practical steps to be undertaken. Each student is expected to undertake a specific project.

Professor Bower
Course 10. Educational Psychology.-Consideration will be given to the psychological basis of conduct; the nature of motive; the nature and laws of learning and especially to those phases of psychology which are of greatest significance for character formation and spiritual growth.

Professor Duvall
Course 12. Introduction to the Science of Theology.-A consideration of theology as a branch of science and an indication of some of the results obtained through the use of the scientific method in theological investigation.

Professor Rowe
Course 14. Introduction to the Psychology of Religion.-Study of the major factors of religious experience, together with the conditions bearing upon its genesis and growth.

Professor Hickman
Course 16. Sermon Construction.-A study of problems in sermon construction and points of psychological contact between the preacher and his congregation. The class work will involve a critical analysis of selected sermons with written reports.

Professor Hickman

Course 18. Christianity and World Movements.-A survey of present world movements building a better world: international political organization, including the League of Nations, World Court, Pan American Union, international law, arbitration; international social, labor, health and student movements; international missionary program, recent conferences at Jerusalem and Havana, relations between younger and older churches, opportunities for foreign service.

Professor Inman

\section*{ADDITIONAL INFORMATION}

A general matriculation fee of \(\$ 5.00\) is due at time of registration and a special fee of \(\$ 5.00\) in each course for which the student registers.

Students are of course responsible for their own arrangements for board and room. Those desiring to engage room and board in the Sunday School Dormitory should write A. S. Dietrich, 810 Broadway, Nashville, Tennessee. Those desiring to room elsewhere should write to Ralph E. Nollner, Lake Junaluska, North Carolina.

All the sessions of the school will be held in the Sunday School Building at the west end of Lake Junaluska.

Academic matters will be in charge of the faculty of the School of Religion, Elbert Russell, Dean.

Those desiring further information concerning courses and conditions of work should address John Q. Schisler, General Sunday School Board, 810 Broadway, Nashville, Tennessee, or Paul N. Garber, Registrar, School of Religion, Duke University, Durham, North Carolina.

\section*{GENERAL REGULATIONS}

The academic year is divided into two semesters. The first semester begins September 24 ; the second, February 2. Commencement is held on Tuesday and Wednesday after the first Sunday in June.

\section*{TIME OF ENTRANCE}

Patrons of the University and students who intend to enter the freshman class are reminded that the entrance examinations are held at the opening of the first semester in September and that this is the proper time to enter. If an applicant for admission cannot come early in the year, he should wait, except in very unusual cases, until the opening of the next semester. It is important that all students be present on the first day of the session, and those who are late incur the penalties described above in this catalogue under the topic "Admission to College" and below under the sub-topic "Course-Cards." Students who enter after the beginning of the semester are marked absent in the work they have missed in the courses to which they are admitted, and these absences are counted as other absences from class.

\section*{MATRICULATION, REGISTRATION, AND ENROLLMENT}

All students must appear before the Committee on Admission and obtain cards for admission or examination. Cards of admission must be presented at the treasurer's office at the time of matriculation. All students, both old and new, are required to matriculate at the beginning of each semester and to obtain from the treasurer a certificate of matriculation which serves also as an enrollment card. Students matriculating in either semester at a date later than that prescribed in this catalogue shall pay to the treasurer a penalty of five dollars for late registration. Students whose course-cards have been approved in the spring in the manner provided below are given an opportunity during the summer to matriculate by mail for the first semester in the fall. No student is admitted to any class without a matriculation card.

\section*{RELIGIOUS EXERCISES}

Chapel exercises are conducted every week day except Saturday throughout the academic year at ten-thirty A.M., and all students are required to attend these services. During the Saturday chapel period all students meet by classes to confer with their respective faculty class advisers. Vesper services are held each Sunday afternoon at \(4: 30\) o'clock.

\section*{NUMBER OF HOURS OF RECITATION WORK}

No undergraduate student is allowed to take less than fifteen hours of recitation work a week without special permission of the Faculty.

\section*{COURSE-CARDS}

Members of the freshman, sophomore, and junior classes are required to submit to the Council on Instruction at a time appointed by the Council not later than May 1 cards showing their selection of courses for the following year. These cards must be approved by the Council. After having been approved, the cards must be filed with the Dean of the College for permanent record. Students in the freshman, sophomore, and junior classes who do not select their courses for the following year at the time appointed by the Council on Instruction have to pay a fee of five dollars to the treasurer of the University before their course-cards may be approved in the fall. Students whose course-cards have been approved but who, for reasons not arising within the University, desire to make a change in the card approved have to pay to the treasurer a fee of one dollar for each change made. Elective courses beyond the number required for a degree may be marked "extra." No course may be dropped without permission of the Faculty.

\section*{CLASS-STANDING}

A student may not rank as a Senior if he has work back of the junior year or more than one study in the junior class; and a student may not rank as a Junior if he has work back of the sophomore year or more than one study in the sophomore class. No student who has any work on which he has previously failed is allowed to enter the senior class as a candidate for graduation.

\section*{EXAMINATIONS}

Mid-year and final examinations, are held in all subjects in January and May respectively; mid-semester examinations for Freshmen and Sophomores are held in November and March. The examination records, combined with the records made in class-recitations, constitute the student's final grades.

\section*{REGULATIONS REGARDING MARKS AND CONDITIONS}

The following regulations have been adopted by the Faculty:
1. Marks shall be reported so as to indicate one of five things:
(a) Passed Without Condition.-A mark of 70 or over shall indicate that a student has passed a course without condition. Students shall be graded according to the following system: Those who are adjudged exceptional ( 95 and above), superior ( 85 to 94 inclusive), medium ( 76 to 84 inclusive), inferior ( 70 to 75 inclusive). Normally the number of students adjudged exceptional should not exceed three per cent., and the number adjudged superior should not exceed twenty per cent.
(b) Conditioned.-A mark of at least 65 and less than 70 shall indicate that a student is conditioned.
(c) Incomplete.-A mark of incomplete may be reported by the instructor if for any reason he is unable to report the final grade at the regular time.
(d) Failed.-A mark of less than 65 shall indicate that the student has failed entirely in the course and that in order to receive credit for it he shall be obliged to take it again in class.
(e) Absent from Final Examination.-The mark "a" shall indicate that the student was absent from a final examination.
2. A student absent from examination and marked "a," if his absence has been excused by the Dean of the College, may receive an examination on the payment of a fee of five dollars to the treasurer of the University, unless the Dean recommends that the fee be remitted. The Committee on Schedule shall arrange for the examination in cases where absences are incurred and excused, and the grade reported in these cases shall be that earned by the student.
3. Students who are conditioned with a mark of at least 65 and less than 70 may remove the condition by complying with any requirements that satisfy the department concerned by March 15 following, if the condition was incurred in the first semester, or by Monday of the week following the opening of the University, if the condition was incurred in the second semester. All students with conditions or "incomplete" grades who have not satisfied the requirements of the departments concerned and obtained a passing grade by these dates are regarded as having failed on the course concerned and must repeat it in class in order to receive credit for it. When a condition is removed, the instructor shall report a grade of 70 ; in the case of a student whose grade was "incomplete," the instructor reports whatever grade the student earns.
4. Not more than six semester courses on each of which an average grade of 70 has been made are allowed to count as credit towards the bachelor of arts degree unless the student has made an average grade of 80 or more on all his work. A student thus deficient will not be allowed to carry in his fourth year more than a normal amount of work.

Excuses for absences from examination are handled in the same way as excuses for absences from class.

\section*{CONDUCT OF STUDENTS}

The University expects of its students loyal and hearty cooperation in developing and maintaining high standards of conduct as well as of scholarship. The University therefore reserves the right, and matriculation by the student is a concession of this right, to ask the withdrawal of any student whose conduct at any time is not satisfactory to the University, even though no specific charge be made against the student.

\section*{EXCLUSION FOR FAILURES}

A student is not permitted to remain in the University in the second semester unless he passes without condition as much as six semester-hours of work in the first semester; he is not permitted to re-enter in September nor to enter the Summer School, if he did not pass without condition at least eighteen semester-hours of work in the previous year.

\section*{DEFICIENCIES IN COMPOSITION}

The following regulations have been adopted by the Faculty:
1. Any Freshman who is found by the Department of English to be unable to handle satisfactorily the work of composition in English 1-2 is required to take special work until he is able to do satisfactorily the regular work of English 1-2.
2. No student who has failed in English 1-2 or \(3-4\) is permitted to become a special student without continuing his work in composition until he has made up his deficiency in this work.
3. Whenever the work of a student in any subject is satisfactory to an instructor except for gross errors in English, the instructor concerned may hand in a provisional grade only, said grade not to count until the student shall have improved his work in composition to the satisfaction of the English Department; a list of such provisional grades, along with evidence of deficiencies, shall be furnished the English Department each term by the officers in charge of the grades, and a report shall be made by this department when the deficiencies shall have been removed.
4. All instructors are requested to warn their students each semester concerning these regulations.

\section*{CANDIDATES FOR ACADEMIC DEGREES}
1. A tentative list of all candidates for the bachelor's degree who have no uncleared conditions charged against them and a tentative provisional list of all candidates for the degree with unsatisfied conditions named shall be prepared under the supervision of the Dean of the College as early in the college year as possible, be read by him to the Faculty at its first regular meeting in October, be furnished in copy to each department of instruction for information and reference, and also posted in copy on the official bulletin board of the University for the information of the students concerned.
2. Copies of a second such tentative list shall be likewise prepared, read, and distributed by April 15.
3. A final list of all candidates for the degree shall be read by the Dean to the Faculty at its first regular meeting in May and adopted by the Faculty as the final list. After the adoption of this list no name may be added to it.
4. Similar lists of all candidates for the master's degree, with courses counting for credit named, shall be prepared, read to the Faculty, and furnished to all departments concerned by the Dean of the Graduate School on the dates named above.
5. Students who complete during a Summer School the requirements for a degree shall be classified for graduation as of the year following the Summer School in which the work was completed, and their names shall so appear in the catalogue of the University and on the commencement program.

\section*{ABSENCES FROM CLASS}

Regular and punctual attendance on class-work is required of all students. Absences must be explained to the Dean of the College. Any student absenting himself without acceptable excuse from his class-work may be disciplined by the Dean at his discretion.

Daily reports of all absences of students from class are made by each instructor and filed in the office of the Dean. A permanent record is kept of the attendance of each student and becomes a part of his general college record.

All absences, whether excused or unexcused, shall be made up to the satisfaction of the department concerned. In case a student has been absent from fifteen per cent. of the exercises scheduled to be held in a course, whether the absences are excused or unexcused, he shall be debarred automatically from the final examination in that subject. Eight absences debar a
student from examination in a course meeting three hours a week, ten absences in a course meeting four hours a week. A student incurring three unexcused absences in a three-hour course or four in a four-hour course shall be debarred from final examination in the same manner. In such a case he can not secure permission to stand the final examination except by written approval of the instructor concerned and of the Dean of the College on blanks provided for that purpose. A student thus debarred from examination must repeat the course in class in order to obtain credit for it. A student is counted absent from meetings of a class held before he matriculates at the beginning of a semester. These absences are handled in the same way as are other absences.

Each absence incurred just before or after the Thanksgiving, Christmas, or Easter holidays shall be counted as two absences, excused or unexcused as the case may be.

\section*{SCHOLARSHIP REGULATIONS FOR ATHLETIC AND OTHER ORGANIZATIONS}

The following regulations have been adopted by the Faculty:
1. Any student who receives less than a passing grade on more than six hours of his required work of the preceding term shall be ineligible to represent the University in any athletic contest, concert, or other public event.
2. Students who are candidates for participation in such contests or events or who are members of organizations engaging in them are required also to be doing satisfactorily the work of the current term. In order to enforce this requirement the following regulations have been adopted:
(a) No team or organization shall represent the University in a public event until a list of its members has been submitted to the Faculty for approval.
(b) It shall be the duty of the student manager of every team or organization to furnish to the secretary of the Faculty for the use of the Faculty at least four weeks before the first public appearance of the team or organization is scheduled to take place, a written list of all candidates for places on such team or organization.
(c) The names of the candidates for places on any team or organization shall be read to the Faculty at its first regular meeting after the list has been furnished to the secretary, and they shall be recorded in the minutes of the Faculty for that meeting.
(d) If at the time this list is presented to the Faculty or at the next regular meeting of the Faculty thereafter any member of the Faculty shall report that a student who is a candidate for a place on a team or
organization is failing in his work, it shall be the duty of the secretary to give the student written notice of this report, specifying the course or courses in which the student is reported as failing. If a student is reported by two or more instructors as failing, he shall be notified that he will not be eligible to represent the University on any team or organization as long as more than one instructor reports him as failing in his academic work.
(e) In case a student manager shall not furnish the secretary of the Faculty with the list of candidates required at the time specified in section (b), the Faculty shall follow the procedure prescribed in sections (c) and (d) when such a list is furnished, and the secretary shall notify any student who is reported by two or more instructors as failing in his work that he will not be eligible to represent the University on any team or organization as long as more than one instructor reports him as failing.
(f) If at any time after this preliminary report is made, a student who was then eligible to represent the College on a team or organization shall be reported by two or more instructors at the same meeting of the Faculty as failing in his work, the secretary shall notify him, specifying in the notice the course in which he is reported as failing, that if he has not removed his deficiency at the end of two weeks, he will be debarred from the team or organization and will not again be eligible to represent the University on a team or organization until he has improved his work so that not more than one instructor reports him as failing.

\section*{REGULATIONS GOVERNING ATHLETIC ELIGIBILITY}

Duke University is a member of the Southern Intercollegiate Athletic Conference. The athletic eligibility regulations of the University comply with the rules governing members of that Conference.

\section*{ABSENCES FROM THE CITY}

No student is allowed to leave the city without the permission of the Dean.

\section*{ADMINSTRATION OF DISCIPLINE}

General oversight of the conduct of students and the administering of discipline are vested in the Dean of the College. The duty of immediate supervision, guidance, and control of the women students is entrusted to the Dean of the Woman's College. However, through the expressed willingness of the students to assume the responsibility of maintaining high standards of morals and honor at all times at the University, the student body has properly become in a great degree self-governing in this respect. Two councils, one of men and the other of
women, each composed of carefully chosen and duly elected representatives of the student body, exercise the authority granted the students to investigate all cases of misconduct, as well as all other cases of violation of proper student standards and traditions, and to make recommendations of penalties based on their findings. Occasions seldom occur where such recommendations cannot be accepted and enforced.

The student councils have been of great help to the administrative authorities of the University. They do not merely exercise police authority for restraining and punishing evildoers; they exert a guiding and stimulating influence for the promotion of high ideals of conduct and student relationships.

\section*{REGULATIONS REGARDING PUBLIC LECTURES AND OTHER PUBLIC OCCASIONS}

All public lectures or addresses and other public events that are given under the auspices of the University or of any organization in any way connected with the University are under the supervision of the Faculty Committee on Public Lectures. All dates and programs must be approved by this committee except in cases where such public occasions have been placed under the supervision of a special committee of the Faculty. To prevent conflicts and to facilitate the work of scheduling the activities of the University, the following regulations have been approved by the Faculty:
(1) The Committee on Public Lectures shall provide each year an official calendar.
(2) No meeting, entertainment, religious service, or athletic contest shall be announced publicly or be entitled to a date at any hour in the day or night unless the occasion has been officially entered in the calendar except in the case of organizations like the Y. M. C. A., the Y. W. C. A., and the literary societies, which have meetings at stated times.
(3) The faculty representative of any organization connected with the University or any member of the Committee on Public Lectures may schedule a public occasion for any date not already taken provided he writes on the calendar under the date he desires the name of the occasion, the hour, and the place of meeting and signs his name under the entry; however, the Committee on Public Lectures shall approve all public events so scheduled and the chairman of this committee shall make known the Committee's approval by signing his name to the calen-dar-entry under the name of the faculty representative proposing the event before any such public event proposed becomes official, the Committee's approval by signing his name to the calendar shall have exclusive right to the date unless consent of the organization affected is obtained
for a change of date or unless the Faculty shall vote to change the date or revoke the right.
(5) The Y. M. C. A. and Y. W. C. A. shall have every Wednesday night, the literary societies shall have every Tuesday night, and other organizations recognized by the Faculty, shall have Monday nights of each month for their meetings and no organization or individuals have a right to take any one of these nights for any public meeting or contest unless the consent of those entitled to the date be obtained or unless the Faculty vote to make a temporary change in the schedule.
(6) These organizations with dates regularly provided have not the right to schedule public meetings for any nights other than these herein mentioned unless no other public meeting is at any time set for the dates they wish, and no one of these organizations with dates already provided has precedence over any other in selecting irregular dates for meeting.
(7) The faculty representative scheduling any public event shall be responsible for getting due notice to the appropriate University office concerning the place and time of the event so that needed arrangements may be made for it.

\section*{REPORTS}

Reports of the class attendance records and of the proficiency in studies of each student are sent to his parents or guardians after the examinations at the end of each semester. For Freshmen and Sophomores, mid-semester reports are made.

\section*{MEDICAL CARE}

The University Physician, Dr. Joseph A. Speed, who maintains offices on the University campus, has general charge of the health of the students. Ample, first-class provision is made in the hospital of the Medical School of the University for caring for all sick students. Any student too ill to attend his college classes is taken to the hospital.

\section*{UNIVERSITY LECTURES AND PUBLICATIONS}

\section*{THE AVERA BIBLE LECTURES}

At intervals of two years a series of lectures is given under the auspices of the Avera Department of Biblical Literature. This series of lectures was established in 1897. These lectures were delivered for the year 1928-29 by Henry Sloane Coffin, President of Union Theological Seminary.

\section*{JOHN MCTYEIRE FLOWERS LECTURES}

The John McTyeire Flowers lectures, established by Mr. B. N. Duke as a memorial to John McTyeire Flowers, a young alumnus of Trinity College who died in the Far East in 1905, were inaugurated in 1921.

\section*{FACULTY LECTURES}

Occasional lectures are given each year by members of the Faculty or by visitors. These lectures are under the supervision of the faculty committee on public lectures, which committee also arranges annually a number of concerts and public entertainments.

\section*{DUKE UNIVERSITY DAY}

In commemoration of the signing by the late James B. Duke, on December 11, 1924, the indenture setting up the Duke Endowment, under which Trinity College was expanded into Duke University, special services are held at the University and at various Alumni Clubs on this anniversary.

\section*{CIVIC CELEBRATION}

A civic celebration is held each year on February 22. It is intended that this occasion shall be of service in cultivating a better citizenship and more patriotic ideals of government.

\section*{THE DUKE UNIVERSITY PRESS}

Prior to 1925 Trinity College had supported the publication of The South Atlantic Quarterly, the Historical Papers of the Trinity College Historical Society as well as its John Lawson Monographs, and a few scholarly books.

With the establishment of Duke University, the trustees of the University authorized the organization of the Duke University Press as an agency for publishing contributions to knowledge in the fields of scholarship represented in the University. To the publications of Trinity College already established, in 1926 was added The Hispanic American Historical Review; in 1929, American Literature; and in 1930, Ecological Monographs. These periodicals are edited with the coöperation of scholars of Duke University and other institutions. The number of volumes annually published has increased, forty titles having appeared since 1925.

\section*{STUDENT ORGANIZATIONS AND ACTIVITIES}

The Men's Association of Duke University comprises all men students in the University. It functions through its officers and a council to initiate policies and to oversee matters within the control of the student body. The council is composed of seven members: three from the senior class, two from the junior class, one from the sophomore class, and one from the Graduate School.

The Women's Student Government Association is similar in character to the Men's Association. Its council is composed of the officers of the Association and ex-officio of the Y. W. C. A. president and an undergraduate representative.

The Young Men's Christian Association and the Young Women's Christian Association are student branches of the national Christian Association. Each body aims to enrich not only the religious life of its members as individuals but also to promote group religious activity. Delegates are sent each year to summer conferences, state conventions, inter-state conventions and the state Bible and missionary institutes. Every year a series of special religious services is held. Bible and missionary study classes and Sunday School teacher-training courses are conducted under the auspices of the Association by members of the Department of Religion.

The Student Volunteer Band is an active branch of the Student Volunteer Movement of North America. This organization is composed of students who have volunteered for some form of foreign missionary service.

The Ministerial Association is a band of students who are preparing for the ministry.

The Symphony Orchestra, two smaller orchestras, and the Duke University Band afford a variety of opportunity for students interested in instrumental music. These clubs work under capable musical direction. Membership is based on competitive trials.

The Men's Glee Club and the Women's Glee Club are both active in concert work. When singing together they comprise the University Chorus. The Men's Glee Club takes two extended trips annually on one of which it is accompanied by the Symphony Orchestra and by one of the smaller orchestras. The Women's Glee Club includes a section of stringed instruments.

The Taurian Players is an organization for the promotion of dramatics at Duke University. Several plays are presented each year, the cast for each of which is determined on the basis of competitive try-outs. The Taurians welcome as associate members in their organization persons interested in the work they are doing.

The Southgate Dramatic Club proposes to foster dramatic interests among women students who are not Taurians. Private theatricals, usually consisting of one-act plays, are given to invited guests.

The Publication Council supervises all student publications of the University. It is composed of three members of the Faculty appointed by the President, four representatives of the student body two of whom are elected by the Men's Association and two by the Women's Association, together with the editors and business managers of the respective publications.

The Chronicle is a weekly newspaper of the University, entirely edited and managed by students. It carries items of local interest, as well as special feature articles and editorial comment.

The Archive is a monthly literary magazine edited and managed by the students. It contains essays, poems, short stories, and book reviews written by the undergraduates of the University together with some contributions from outside sources.

The Chanticleer is the year-book of the college. It portrays by word and picture the most important events of each school year.

A number of clubs exist on the campus, each of which fosters interest in some special subject or project.

The Trinity College Historical Society promotes interest in the study of history and the collection and preservation of historical documents, books, pamphlets, and the like.

The Classical Club meets to discuss literary, linguistic, historical, and archaeological aspects of the life and civilization of the ancient Greeks and Romans.

The Physics Club deals with interesting projects in physics which cannot be thoroughly discussed in the classroom.

The W. H. Pegram Chemistry Club performs a similar service in the field of chemistry.

The French Club draws together students particularly interested in the French language and literature.

The Polity Club promotes discussion of current problems in the field of international relations and American politics. It is affiliated with the International Relations Club.

The Braxton Craven Education Association consists of students who are interested in present-day educational problems.

The Biological Club gives its members opportunity to discuss important phases of biological work as well as training in the preparation and presentation of papers.

The Crowell Scientific Society is a union of all the departmental scientific societies of the University for the promotion of study and research within the University by coördinating the various departmental efforts.

The Cosmopolitan Club is open to all students from foreign countries and a few American students by invitation. The purpose of the club is to promote international understanding and good-will.

The Fortnightly Club, a chapter of the national literary fraternity of Sigma Upsilon, is composed of men of the junior and senior classes whose interests are literary. It encourages original work on the part of its members as well as the study of influential writers, ancient and modern.

The Debate Council, composed of three members of the Faculty, and two representatives of each of the literary societies, supervises and systematizes the work of debating both in the University and with other colleges.

The Columbian Literary Society, founded in 1846, and the Hesperian Society, organized in 1851, are the oldest undergraduate clubs on the Duke University campus. Their record is one of creditable achievement in public speaking which they encourage by an award of medals for excellence in that art. The two societies debate each other annually. The halls reserved in East Duke for these societies are modeled after the Chambers of Congress in the national capitol.

The League of Women Voters has a chapter at Duke University.

The Junior Big Sisters is an organization of Juniors for assisting Freshman girls in their adjustments to college life.

The Forum Club has as its object the promotion of interest in the classics among women students.

The Town Girls' Organization brings together the day students among the women.

A number of honorary orders and fraternities carry on their work at Duke University. The general nature of these societies is indicated below.

Phi Beta Kappa, the oldest Greek letter fraternity in existence, was founded at William and Mary College in 1776. The Beta Chapter of North Carolina was organized at Trinity College on March 29, 1920. Membership is open only to those who have an average of 90 for six consecutive semesters of college work.

Tau Kappa Alpha (National Forensic Fraternity)
Sigma Upsilon (See Fortnightly Club, p. 124)
Kappa Delta Pi (National Education Fraternity)
Theta Alpha Phi (National Dramatic Fraternity)
Lambda Phi Gamma (National Music Fraternity)
Sigma Pi Sigma (National Physics Fraternity)
Phi Sigma (National Biological Fraternity)
Sigma Tau Delta (National English Fraternity)
Sigma Nu Phi (National Law Fraternity)
Alpha Kappa Psi (National Commercial Fraternity)

Delta Upsilon Beta (Local Band Fraternity)
Iota Gamma Pi (Local Scientific Fraternity)
Psi Kappa Alpha (Local Economics Fraternity)
Chi Delta Phi (National Literary Sorority)
Delta Phi Rho Alpha (Local Sorority fostering college spirit, especially athletics)

Nu Sigma (Local Biological Sorority)
Red Friars, founded in 1913, is a secret society restricted to men of the senior class. Membership is limited to a small number who have manifested qualities of leadership by meritorious service as undergraduates.

Omicron Delta Kappa promotes qualities of leadership in publications, athletics, and other forms of campus activity.

White Duchy is a secret order comprising seven senior women recognized as representing the highest qualities of leadership in the various activities in which they have taken part.

The Tombs is a secret order of male students for the promotion of various campus activities, especially athletics. Membership is restricted to students of the junior and senior classes.

The 9019, a junior-senior scholarship society, was founded at Trinity College in 1890. The society started the South Atlantic Quarterly and has under its auspices the annual civic celebration on Washington's birthday and the annual declamation contest for high-school pupils.

EKO-L is an organization of women students of the junior and senior classes to promote scholarship and the interests of the University.

Beta Omega Sigma, founded in 1917, is a local sophomore order.

The work of the social fraternities and inter-fraternity relationships at Duke University are governed by the Pan-Hellenic Council, which is composed of one representative of each national fraternity on the campus. The council has as its adviser a member of the Faculty chosen by the council. By order of the council, no student may be initiated into a fraternity until he has passed at least four courses in the semester preceding the earliest official time for the initiation of fresh-
men. The following social fraternities have chapters at Duke University:
\begin{tabular}{ll} 
Alpha Tau Omega & Phi Delta Theta \\
Kappa Sigma & Delta Tau Delta \\
Kappa Alpha & Phi Sigma Delta \\
Pi Kappa Alpha & Pi Epsilon Pi (local) \\
Sigma Phi Epsilon & Sigma Tau Alpha (local) \\
Pi Kappa Phi & Psi Delta Sigma (local) \\
Sigma Chi & Sigma Delta (local) \\
Delta Sigma Phi & Alpha Omega Sigma (local) \\
Lambda Chi Alpha &
\end{tabular}

The Women's Pan-Hellenic Council, composed of three members from each sorority on the campus, governs sorority affairs. The sororities represented at Duke University are:

Alpha Delta Pi
Kappa Delta
Zeta Tau Alpha
Kappa Alpha Theta

Sigma Beta (local)
Delta Psi (local)
Mu Lambda (local)

\section*{ALUMNI ORGANIZATIONS}

\section*{ALUMNI ASSOCLATION}

The Alumni Association of Duke University is composed of the male graduates and former students of Trinity College and Duke University. The Association gives its annual dinner on Tuesday of Commencement week at which a message of greeting is given by a representative of the class holding its twenty-fifth anniversary reunion. The annual business meeting of the Association is held at this time. In 1930 the alumni greeting was delivered by M. Eugene Newsom, of Durham, N. C., of the Class of 1905. According to the Charter of the University, the alumni are entitled to twelve representatives on the Board of Trustees. At the annual meeting of the Association all vacancies in the alumni representation on the Board are filled, and four representatives to serve on the Athletic Council, and five representatives-at-large to serve on the Alumni Council are elected. The officers of the Association are : President, J. G. Korner, '08, Washington, D. C.; vice-presidents, Richard C. Kelly, '07, Greensboro, N. C.; Edgar S. Bowling, '99, New York; W. Grady Gaston, '11, Gastonia, N. C.; secretary, Henry R. Dwire, '02, Durham, N. C.

\section*{ALUMNAE ASSOCIATION}

The Alumnae Association of Duke University is composed of the women graduates and former students of Trinity College and of Duke University. The Association gives its annual dinner on Tuesday of Commencement week, at which an address is made by a representative of the class holding its twenty-fifth anniversary reunion; the annual business meeting of the Association is held at this time. The work of the Alumnae Association is conducted on much the same basis and through the same channels as the work of the Alumni Association. The officers of the Association are : President, Mrs. Bailey Groome, '13, Statesville, N. C.; vice-president, Mrs. E. L. Hillman, '20, Greenville, N. C.; secretary-treasurer, Miss Elizabeth Aldridge, '24, Durham, N. C.

\section*{GENERAL ALUMNI ASSOCIATION}

The General Alumni Association was formed to promote the work of the local alumni and alumnae associations; and to arrange for the annual Home Coming of alumni and alumnae. A number of county and local alumni associations have been formed in North Carolina and other states. A copy of the constitution and by-laws proposed for such associations will be furnished on application to the Alumni Secretary. This organization holds its annual meeting on Home Coming Day.

\section*{ALUMNI COUNCIL}

To give definite direction and supervision in the campaign for the erection of the Alumni Memorial Gymnasium, and for other purposes, an Alumni Council was provided for at the June, 1919, meeting of the Alumni Association. Since that time the Council has developed into a working body for the promotion of alumni interests by reason of its size and frequency of meetings. The constitution of the Council sets forth its purpose as being "to advance the interests and influence of Duke University ; to bind more closely together the alumni and the University; to encourage class and geographical organization of the alumni; to keep in touch with undergraduate activities; to raise funds from alumni and friends for the conduct of the alumni work, the establishment of loan funds, the publication of The Alumni Register of Duke University, and for the maintenance and endowment of the University ; to report from time to time to the President and the Board of Trustees of the University any facts and recommendations deemed by the Council worthy of consideration for the best interest of the University ; and to act as a medium for making known to the University the ideas of the alumni and to the alumni the wishes of the University."

The membership is made up of Representatives at Large, elected by the Alumni Association at its annual meeting; Class Representatives, elected by reunion classes on the occasion of their fifth anniversary, or a multiple thereof; and representatives selected by the Federated Alumni Clubs.

Representatives at Large: Sidney S. Alderman, '13, Washington, D. C.; Charles H. Livengood, '04, Durham; Hersey E. Spence, '07, Durham; J. L. Horne, Jr., '09, Rocky Mount.

Class Representatives: William K. Boyd, '97, Durham; Joseph P. Breedlove, '98, Durham; Edwin S. Yarbrough, '02, Durham; John D. Langston, '03, Goldsboro; Walter G. Jerome, '07, Winston-Salem ; Jule B. Warren, '08, Raleigh ; Henry A. McKinnon, '13, Maxton; Kemp P. Neal, '13, Raleigh; J. Raymond Smith, '17, Mount Airy; Luther L. Gobbel, '18, Durham; Byrd I. Satterfield, '22, Roxboro; Thomas G. Neal, '23, Laurinburg.

\section*{ALUMNAE COUNCIL}

At the June, 1925, meeting of the Alumnae Association the Alumnae Council was organized to function in a manner similar to that of the Alumni Council, in the interest of the former women students and of the University. Its purpose and form of organization is very much the same as that of the Alumni Council.

Representatives at Large: Nan Goodson (Mrs. C. L.) Reade, '06, Tarboro; Nell Umstead, '08, Durham; Grace McGranahan (Mrs. Plato) Monk, '18, Farmville ; Pattie Knight (Mrs. R. M.) Cooksey, '23, Thomasville ; Annie Garrard, '25, Durham.

Class Representatives: Lila Markham (Mrs. W. J.) Brogden, '02, Durham; Edna Kilgo (Mrs. Kope) Elias, '03, Charlotte ; Susie M. Michaels, '07, Durham; Sallie L. Beavers, '08, Durham; Ruby Markham, '12, Durham; Bess L. Widenhouse (Mrs. L. D.) Hayman, '13, Troy; Annie T. Smith, '17, Durham; Kathleen Hamlen (Mrs. R. H.) Watkins, '18, Durham; Lyda Bishop, '22, Durham; Aura C. Holton, '23, Durham.

Ex Officio: Mrs. Bailey Groome, '13, Statesville ; Miss Alice Baldwin, Durham; Miss Elizabeth Aldridge, '24, Durham; H. R. Dwire, '02, Durham.

\section*{DUKE UNIVERSITY NEWS SERVICE}

The Duke University News Service is the official publicity bureau of the University for the purpose of sending out news to the press. The service is under the supervision of the Alumni Secretary, and is managed by Albert Alexander Wilkinson, '27, Director of Publicity.

\section*{THE ALUMNI REGISTER OF DUKE UNIVERSITY}

The Alumni Register of Duke University is a monthly magazine published by the Alumni Association in the interest of the alumni and the University. It aims to keep the alumni in touch with one another and with the University. The editorial staff is composed of Henry R. Dwire, '02, editor and business manager ; Miss Elizabeth Aldridge, '24, and A. A. Wilkinson, '27, assistant editors; Charles A. Dukes, '29, advertising manager.

\section*{FEES AND EXPENSES}

The following tables show the general fees and charges collected from all students and the special fees collected from those taking courses in the sciences. All fees for each semester are due and payable, unless otherwise specified, at the time of registration at the beginning of that semester, and no student is admitted to classes until his fees have been paid.

\section*{GENERAL FEES}
Matriculation, per semester ..... \(\$ 25.00\)
Tuition, per semester ..... 75.00
\(\ddagger\) Room rent, per semester (two in room) ..... 62.50
Athletic fee, admitting students to all athletic contests held on the University grounds, per semester ..... 5.00
\(\dagger\) Damage fee, payable annually at the time of first registration ..... 1.00
Medical fee, per semester ..... 2.00
Library fee, per semester ..... 5.00
Commencement fee, payable annually at the beginning of the sec- ond semester ..... 3.00
Publication fee:
First semester ..... 2.50
Second semester ..... 3.00
Diploma fee, payable by candidates for degrees at the beginning of the second semester; refunded if the diploma is not awarded ..... 5.00
For further information concerning room rent see below.
LABORATORY FEES
Botany 1 and 2. .....  2.50
Botany 51 and 151 ..... 5.00
Botany 52, 101, 102, 111, 112, and 52 ..... 2.00
Botany 201 ..... 4.00
Chemistry \(1,2,21,30,41,261,262,215,216,231,232,240\), and 260 ..... 6.00
Chemistry 151, 152, 241, 244, 253, 254, and 256. ..... 7.50
Civil Engineering 10-See Summer School catalogue.
Civil Engineering 11, 114 ..... 1.00
Electrical Engineering 151, 152, 153, 154, 155, 161, and 162 ..... 2.00
Physics, all courses ..... 2.00
Zoölogy, all courses (except 1 and 2) ..... 3.00
Zoölogy 1 and 2. ..... 2.50

\footnotetext{
\(\ddagger\) See statement concerning room charges in the Woman's College.
\(\dagger\) Any surplus remaining in this fund at the end of a year is applied to some student activity.
}

\section*{TEACHERS TAKING COLLEGE COURSES}

Teachers in near-by schools taking one or more courses are required to pay a registration fee of \(\$ 5.00\) and a tuition fee of \(\$ 2.00\) per semester-hour of credit in addition to any regular laboratory or other fees collected from regular students taking the courses.

\section*{ROOMS AND CONDITIONS OF RENTING THEM}

The itemized statement in the general table of expenses includes the care of rooms, in which everything essential in the way of furniture is provided. All rooms are supplied with heat, water, and electric light. Each student furnishes his own blankets, sheets, pillow-slips, towels, and pillows.

Rooms are reserved only for students who have been officially accepted by the University. They are rented for no shorter period than one semester. A room deposit of \(\$ 5.00\) is required of each applicant for admission. This fee is deducted from the room charges at the time of registration for the fall semester. The reservation fee will be refunded to any applicant not accepted by the University provided the official receipt for the fee, given to all paying it, is presented either in person or by letter to the treasurer's office, but students who make application and are accepted will not be entitled to have the reservation fee refunded unless the request is made by or before August 1.

An old student who wishes to retain his room for the succeeding year must notify the treasurer's office on or before May 15. All rooms which have not been signed for on or before May 15 will be considered vacant for the succeeding year. Unless a deposit of \(\$ 5.00\) for each proposed occupant, in part payment of rent, is made by August 1 reservations are cancelled and the University is free to rent the room to other students. When a room is once engaged by a student, no change will be permitted except with the consent of the treasurer. Leaving one room and occupying another without permission is strictly against the rule and will render the offender liable to charge for both rooms for the entire semester. No occupant is permitted to rent or sublet a room to another occupant. The use of a room for merchandising of any kind is strictly forbidden.

The University does not assume the responsibility of selecting and assigning room-mates, though it will gladly render any assistance possible in the matter.

\section*{REGULATIONS REGARDING ROOMS}

A fine of \(\$ 2.00\), payable to the treasurer of the University, shall be charged to any student who has moved furniture from one room to another without permission from the University authorities.

A fine of \(\$ 2.00\), payable to the treasurer of the University, shall be charged to the occupants of any room in which the permanent lighting fixtures have in any way been altered or changed. A like fine shall be imposed upon the occupants of any room with lights having a total capacity of more than 100 watts.

A fine of \(\$ 5.00\), payable to the treasurer of the University, shall be charged to any student moving from one room to another upon the campus without permission from the University authorities.

\section*{DORMITORIES}

On the west campus there are three groups of dormitories, each group forming a quadrangle enclosing a court. For the present these groups of dormitories are designated as A, B, and C. They contain ample rooming quarters for all the men students.

\section*{BOARDING ACCOMMODATIONS}

Beginning with the academic year 1930-31 the University will open its dining hall in the Union on the west campus with accommodations sufficient to provide in a superior way for all resident men students. It is the policy of the University to furnish board to its students at actual cost. Charges for board will not exceed \(\$ 25.00\) per month.

The Union is the logical center of student activities for men and it will be found desirable for male students to board in its supervised halls. In the Union are located the University Post Office, the University Store, the University Barber Shop, and all publication staff offices.

In addition to the Union dining halls a Coffee Shop will be operated for the convenience of students and visitors.

\section*{PUBLICATION COUNCIL}

The Publication Council was authorized by the Trustees at the mid-year meeting in 1926-27. This council has control of the undergraduate publications. It is to be composed of members of the faculty appointed by the President, two alumni elected by the Alumni Council, representatives of the student body and the different publications. A publication fee of \(\$ 5.50\) was authorized by the Trustees to be collected from each undergraduate, \(\$ 2.50\) payable at the beginning of the fall semester and \(\$ 3.00\) at the beginning of the spring semester.

\section*{LAWS REGULATING PAYMENTS}

The Executive Committee of the Trustees of Duke University has enacted the following regulations, which govern the payment of all fees due the University:
1. The president and the treasurer of the University have no authority to suspend, or in any way alter these regulations.
2. Matriculation and tuition fees are never refunded.
3. Any student who has failed to pay his bills on the dates advertised in the catalogue is denied the right to attend classes until his account is settled in full.
4. No student is considered by the faculty as an applicant for graduation until he has settled with the treasurer for all of his indebtedness to the University.
5. No student is allowed to stand the mid-year or final examinations of the academic year who has not settled all his bills with the treasurer of the University.

When a student wishes his bills sent to his parent or guardian, the student or his parent or guardian must so notify the treasurer of the University in writing in due time, but this in no way releases the student from liability to established penalties if his bills are not paid on the dates advertised.

\section*{TRANSCRIPTS}

Students desiring to transfer from Duke University to another institution are entitled to one transcript of their record. A charge of one dollar is made for each additional copy.

\section*{ESTIMATED EXPENSES FOR AN ACADEMIC YEAR}

The necessary expenses of a student are moderate; the University dormitories provide thoroughly comfortable and wholesome living conditions at a minimum cost, while all charges made by the University have been kept low. Incidental expenses depend naturally upon the tastes and habits of the individual. The following table gives the necessary college expenses for one year.
\begin{tabular}{|c|c|c|c|}
\hline & Low & moderate & liberal \\
\hline Tuition & \$150.00 & \$150.00 & \$150.00 \\
\hline Matriculation ........................... & 50.00 & 50.00 & 50.00 \\
\hline Room-Rent .................................. & 100.00 & 125.00 & 150.00 \\
\hline Board & 225.00 & 225.00 & 225.00 \\
\hline Laundry .......................................... & 20.00 & 25.00 & 30.00 \\
\hline Books & 22.50 & 30.00 & 45.00 \\
\hline Commencement Fee & 3.00 & 3.00 & 3.00 \\
\hline Library Fee .................................... & 10.00 & 10.00 & 10.00 \\
\hline Athletic Fee ................................... & 10.00 & 10.00 & 10.00 \\
\hline Damage Fee .................................. & 1.00 & 1.00 & 1.00 \\
\hline Medical Fee ................................... & 4.00 & 4.00 & 4.00 \\
\hline Publication Fee & 5.50 & 5.50 & 5.50 \\
\hline Total...................................... \(\$\) & \$601.00 & \$638.50 & \$683.50 \\
\hline
\end{tabular}

Students who hold scholarships or other exemption from tuition will deduct one hundred and fifty dollars from the above totals.

\title{
SCHOLARSHIPS AND OTHER SOURCES OF AID
}

\section*{UNDERGRADUATE SCHOLARSHIPS}

Ten scholarships paying tuition are offered to undergraduates. Five are held by members of the sophomore class and five by members of the junior class. Sophomore scholarships are awarded at the end of the freshman year and junior scholarships at the end of the sophomore year. They are awarded on the basis of the applicant's character and promise as indicated by his work in college.

The University reserves the right to withdraw a scholarship at any time from a student who does not make worthy use of it.

\section*{ANGIER B. DUKE MEMORIAL SCHOLARSHIPS}

The Angier B. Duke Memorial, Incorporated, awards four scholarships with an annual value of \(\$ 250\) each to undergraduate students in Duke University. These scholarships are awarded as follows: one on the basis of merit and necessity to an accredited high-school graduate entering the freshman class of Duke University; and one each to a member of the sophomore, junior, and senior classes on the basis of merit, necessity, and worthy individual contributions to university life. The Angier B. Duke Memorial also administers through an advisory committee of the officers of the University a loan fund of \(\$ 1,000,000\) for undergraduate students.

\section*{LOAN FUNDS}

In addition to the Angier B. Duke Memorial loan fund, the University administers other endowed loan funds for the benefit of students who are not financially able to meet their expenses. The loan funds are kept by the treasurer as separate and distinct funds from all other endowments and holdings of the University and are used for no other purpose than to aid worthy students of the University. These funds are administered in accordance with the following regulations:
1. No loan shall be made to a student who violates any of the regulations of the University or whose classwork is not satisfactory to the Faculty.
2. Loans will be made only to students who are taking full courses of study that lead to a degree, and all loans must be arranged for not later than one week after the beginning of a semester.
3. Every applicant for a loan must present with the application such security as the President of the University may approve, and no money shall be advanced before a note with approved security is in the hands of the treasurer of the University.
4. No loan shall be made to defray any other expenses than those incurred during the academic year for tuition, matriculation, and room-rent.
5. Interest at the rate of six per cent. annually shall be charged for all loans of money, and the interest must be paid annually.

\section*{SPECIAL TUITION SCHOLARSHIPS}

The J. A. Odell, J. M. Odell, George W. Watts, Herbert J. Bass, C. W. Toms, Arthur Ellis Flowers, Heath, Weatherby, Banks-Bradshaw, McMullan, Elisha Cole, E. M. Cole, John T. Ring, A. D. Betts, John W. Neal, Jr., Moore, Buchan, Parrish, and Mary Newby Toms scholarships are open to undergraduate students.

\section*{SONS AND DAUGHTERS OF MINSTERS}

The sons and daughters of ministers are exempt from paying tuition; they are required to pay all other college fees.

\section*{CANDIDATES FOR THE MINISTRY}

Candidates for the ministry who are not sons of preachers are required to give their notes for tuition. If they enter the regular ministry within three years after leaving college, these notes will be surrendered to them; otherwise the notes will be collected.

\section*{HONORS AND PRIZES}

\section*{HONORS}

All students in the freshman and sophomore classes who make an average of 90 or above are given honors.

Students who have shown exceptional attainments in a group of studies covered by the work of one of the departments of the University may become candidates for honors in that department at graduation.

Any department may at its discretion each year offer work the satisfactory completion of which will be one of the requirements for honors. This work shall be in addition to that required for graduation and may take the form either of additional work done in conjunction with the regular courses of the department, or of work independent of such courses. In quantity it shall be at least equivalent to that required for two semester-hours of credit in an advanced course.

The granting of department honors shall be dependent on the fulfillment of the following requirements:
1. In order to be eligible for honors in a department a student must, by the end of the senior year, have completed, with an average grade of at least 90 , twenty-four (if department prefers, eighteen) semesterhours of work taken in that department after the freshman year. The student must obtain, on or before October 15 of the senior year, the approval of the head of the department of the courses that constitute the eighteen or twenty-four semester-hours required.
2. The student must enroll for the honors work of the department on or before October 15 of the senior year and must complete this work satisfactorily by the end of the senior year.
3. No student may enroll for the honors work of a department if he is carrying a schedule of regular courses in his senior year in excess of thirty-two semester-hours.
4. No student may enroll for the honors work in more than one department.
5. Those students who make an average grade of 95 in as many as twenty-four semester-hours (eighteen if the department prefers) in courses as above described and complete satisfactorily the honors work prescribed by the department are given highest honors.

The degree of bachelor of arts or bachelor of science with distinction is conferred under the following rules:

Students who have completed as much as three years of their college work in Duke University and who have attained an average grade of 90 are recommended for a degree magna cum laude; those who have attained an average grade of 95 are recommended for a degree summa cum laude.

\section*{MEDALS AND PRIZES}

The Wiley Gray Medal was established by the late Robert T. Gray, Esq., of Raleigh, North Carolina, to be awarded annually in memory of his brother. It is given for the graduating oration that shall be, in the opinion of a committee appointed on the day of Commencement, the best speech, with respect to both declamation and composition.

The Fortnightly Club offers annually cash prizes for the best literary productions by undergraduate students of the University.

The Debate Council has authorized the awarding of medals to members of the graduating class who have represented the University in at least two intercollegiate debates. The medals are given by the local chapter of the Tau Kappa Alpha fraternity.

The Southern History Prize is awarded each year for the best essay submitted dealing with a subject relating to Southern History. The prize is twenty-five dollars in cash donated by an anonymous friend of the University. The competition for the prize is conducted under regulations adopted by the Trinity College Historical Society.

The Robert E. Lee Prize is the gift of Reverend A. W. Plyler, of the class of 1892 , and of Mrs. Plyler. The sum of one hundred dollars is awarded annually at Commencement, preferably to that member of the senior class who in character and conduct, in scholarship and athletic achievement, in manly virtues and the capacity for leadership has most nearly realized the standard of the ideal student. The Dean of the College, the Graduate Manager of Athletics, and the president of the Student Council constitute a committee to draft and adopt regulations governing the award.

The Robert Spencer Bell Prize is given by Mr. James A. Bell of the class of 1886 in memory of his son. The sum of one hundred dollars is awarded annually at Commencement on much the same general principles as is the Robert E. Lee Prize,
except that the Robert Spencer Bell Prize is limited to selfhelp students, and in making the award greater emphasis is placed on the work of the student in literary societies than on his athletic record.

The George F. Ivey Science Prize, established by Mr. George F. Ivey, is awarded each year for the encouragement of scholarship in physics, biology, and chemistry. The prize is fifty dollars in gold and was awarded the first year in physics, the second year in biology, and the third year in chemistry, and thereafter in this rotation unless otherwise determined by the donor.

The following rules have been adopted for the contest:
I. Any undergraduate student having already passed the first general course of eight semester-hours credit in the department concerned and having registered for an advanced course of not less than six semesterhours credit is eligible to compete for the prize.
II. By the end of the first week in May the department concerned will prepare a list of not more than twenty eligibles. The list must be approved by the Dean of the College and then be submitted to all students in courses above the first course in the department who will select by ballot the names of six candidates for the prize. The faculty of the department, acting as a committee, shall select the winner of the prize from among these six candidates.
III. The decision in every case is to be based upon such considerations as originality, industry, and initiative in executing work as well \(2 s\) upon grades.
IV. No student, having once won this prize, may again compete for it.

Dr. R. C. Parker gave to Duke University a silver cup of Chinese manufacture to be used for the encouragement of scholarship in Physics. The award is made annually by a committee from the Department of Physics acting with the President of the University to that student of Physics 1-2 who by the end of the academic year is judged to show the greatest promise as a student of Physics. The winner is chosen not only for his mathematical grades, but also for his industry, growth in power of reasoning, originality of point of view, and skill in experimentation. The name of the winner is engraved on the cup, of which he is given possession, subject to certain necessary regulations, until the next award is made.

The Iota Gamma Pi Science Fraternity offers an annual prize of twenty-five dollars to a member of the junior class
majoring in science who is judged to be the leading student in the scientific courses of the University. The fraternity submits to the judges a list of students eligible for the prize. The committee of award is composed of the Dean of Men, and one member each from the departments of Biology, Chemistry, Physics, and Engineering. The departments concerned choose their own representatives on this committee. The award is made on the following basis: quality of scientific work, 50 points; personality and general ability, 30 points; quality of work in departments other than scientific, 20 points.

The prize is publicly awarded by the president of the fraternity in Chapel during the second week of May.

\section*{HONORS IN GENERAL SCHOLARSHIP}

HONORS IN DEPARTMENTS
Chemistry-Jacob M. A. deBruyne, Talmadge L. Peele, William S. Sloan.

English-Annie L. Caldwell, Emma Lucile Mulholland. History-Eben C. Morgan.
Mathematics-T. W. Newton, John L. Woodward.
Zoology-Mary E. Shipp.
SENIOR HONORS
Summa cum laude
Esther Marie Metzenthin
Magna cum laude

Martha Lipscomb Adams Dunham Worth Boyette Annie Louise Caldwell Rachel Victoria Copeland Jacob M. A. deBruyne John Elwood Doxey Alfred M. Franko Mildred Elizabeth Holton Jennings Graham King

Mildred Murnick
Talmadge Lee Peele
Nelson G. Rosenburg
Roxie J. Sasser
William Stringfield Sloan
Thomas Edwards Summerrow
Helen J. Taylor
John Lisbon Woodward
Edwin S. Yarborough, Jr.

\section*{SOPHOMORE HONORS}

Henry Lucian Andrews Clarice Margaret Bowman Carl Frederic Bretholl Emma Ellen Cooke Lila Roane Cross Grady Craven Frank Carroll Edgar Gunnin Gladys Merle Higgins Edgar Jerome Hocutt Morris Jones
Peggy Lavinder

\author{
Ernest Bruce Brooks
} Elizabeth Ray Clarke Royden Eugene Daniels Theresa Diamond Argyle Glenn Parker Redman Hamlin Margaret Gertrude Harrell
Elmer C. Harrison
Edith Horne Leach

Charles H. Livengood, Jr.
Kenneth D. McDougall
Whitfield Huff Marshall
Joseph Gaither Pratt Alfred E. Tonne Sam Bobbitt Underwood, Jr. Mary Lipscombe Walker Erma Elizabeth Williams Donald Albert Wittick Lila Mack Woodward

FRESHMAN HONORS
Samuel J. Margolin Jasper Howell Miller Nicholas Orem, Jr.
Sara Elizabeth Ownbey
Robert Lee Peppell
Laura Mae Seeley
Gladys Winston Shuford
Charles Edward Stuart
Ruth Evelyn Teel

\section*{HOLDERS OF SCHOLARSHIPS} JUNIOR SCHOLARSHIPS*
Grady C. Frank, College Station.
J. G. Pratt, Route 7, Winston-Salem, N. C.
C. H. Livengood, Jr., 1108 Minerva Ave., Durham, N. C.

Kenneth McDougall, Route 7, Durham, N. C.
Herman Walker, 616-26th St., Bradenton, Fla.
SOPHOMORE SCHOLARSHIPS*
Theresa Diamond, 487 Jefferson St., Danville, Va. Edith Leach, 511 West Main St., Washington, D. C. Argyle Glenn, 2117 Parkwood Ave., Richmond, Va. Nicholas Orem, 20 Owens Ave., Hyattsville, Md. S. J. Margolin, 88 West End Ave., Brooklyn, N. Y.

\footnotetext{
*These scholarships are awarded only to the five highest ranking members of the class.
}

\section*{COMMENCEMENT, JUNE, 1929}

Sunday, June 2, 8:30 p.m.-Baccalaureate Address, the Reverend William Pierson Merrill of New York.

Monday, June 3, 8:30 p.m.--Senior Orations.
Tuesday, June 4, 11:00 a.m.-Commencement Sermon, Bishop Francis John McConnel of New York.

Wednesday, June 5, 11:00 a.m.-Commencement Address, Senator Walter Franklin George of Washington, D. C.

\section*{DEGREES IN COURSE}

BACHELOR OF ARTS

Abernathy, Thómas Edison Adams, Martha Lipscomb
*Albergotti, James McAlpin, Jr.
Anderson, Virginia Pearl
Ashley, Howard
Autry, John Duncan Asbury
Aycock, Clarence Bryan
Bailey, Edward Cunningham
Barker, Felix Scott
Barnwell, Roy James
Bennett, Charles Glenn
Berlin, Harry Irvin
Bird, Matthew John
Bolich, Marion
Bost, Henry C.
Boyett, Dunham Worth
Bradshaw, John William
Braswell, John William
Brent, Fred Whaly
Broome, Oscar Whitfield
Brown, Cansau Delane
Brummitt, Fred Graham
Bruton, Ogden C.
Bruton, Robert Bradley
Buffaloe, Ethel Mae
Bunting, Elisha Harry
Burke, John Locke
Caldwell, Annie Louise
Candler, Coke
Cannon, Marjorie
Carper, John Howard
Carruthers, Joseph Tinnie, Jr.
Carter, Elizabeth

Cassidy, Robert Aloysion
Cavenaugh, Harold Rupert
Chesson, Martha Estelle
Christian, Linwood Barrett
Clay, Charles Wesley
Cleaver, James Andrew
Cook, Grady O'Neal
Cooke, Selena Greene
Cooper, Viola Lavender
Copeland, Rachel Victoria
Council, John Cromartie
Crabtree, Adrian Blair
Cranford, William Edwards
Crews, Catharine Hunt
Cross, Pauline Eugenia
Cross, William Frank
Crowder, Cecil Robert
Crumpacker, Bernice
Culberson, Gladys Flowers
Culbreth, Thomas Franklin, Jr.
Curtis, Robert Arnold
Daniel, John Webb
Daniel, Mary Helm
Davis, Harry Wesley
Davis, James Heath
De Bruyne, Jacob M. A.
Dorsett, Harrison Wood, Jr.
Doxey, John Elwood
Draughon, Florence Margaret
Dukes, Charles Aubry
Dunstan, William Edward, Jr.
Earnhardt, Fred Wilcox
Edwards, Moir Williamson

Ellison, Reuben Harold
Ervin, Everett Lamont
Eubanks, Helen King
Faulkner, Littlejohn Taylor
Fitzgerald, Florence
Franko, Alfred M.
Frazier, Roșe Marie
Frazier, William Guthrie, Jr.
Futrell, James Wilbur
Garrard, Mary Louise
Gay, Charles Houston
Gentry, Thomas Oliver
Gery, Delma Louis
Greene, Jennie
Greene, Katie Lee
Gregory, John M. Moody, Jr.
Gregory, Priscilla
Gunter, Ellęn Mae
Hancock, Doris
Hardee, Guy Taylor
Hardison, Stewart Ralph
Hargrave, Charles Hamilton
Hatcher, George Brown
Hathcock, Thomas Alexander
Hauss, Mary Arden
Hayes, Annie Lucille
Haywood, Zoa Lee
Hester, Ernest Carrington
Hinton, Mildred Jones
Hipp, Bertha C.
Hix, Edwin Jonathan
Holton, Mildred Elizabeth
Horne, Richard Caswell
Ireland, William Nelson
Jackson, David Kelly, Jr.
Jenkins, Ormah Woods
Johns, Hazel Virginia
Johns, Nancy Pauline
Johnson, Amos Neill
Johnson, Audrey Glenn
Johnston, Frances Elizabeth
Johnston, Robert Milton
Jones, Bernard Huyette
Keever, Anna Elizabeth
Keffer, Harry B.
Kendall, Henry L., Jr.
Kendrick, Charles Mattox
Kennedy, Katherine
Kilgo, Lawrence Harrell
King, Elizabeth

King, Jennings Graham Kleckner, Orrin Frank Klutz, Lillie Mae
Lamm, Roney William
Larsen, Edith
Layton, Martha C.
LeGette, Mary Watson
Lineback, Vann Roberts
Lumley, Victor A.
Lutz, Earl Hubert
McDonald, Ralston Lattimore
McEachern, Sleiman Rutledge
McGranahan, Lois Elizabeth
Mangum, Maynard
Margolis, Reuben
*Martin, Thomas Edward
Masters, Vero R.
Matheson, William McRae
Mayo, Louis Allen
Messner, Dorothy Evelyn
Metzenthin, Esther Marie
Mewborne, William Burke
Miller, Kellah Chaplin
Miller, Kenneth Thompson
Montgomery, Margaret Elizabeth
Morgan, Eben Cornelius
Moses, Alice Ellen
Moyle, Monte Boddie
Mulholland, Emma Lucille
Murnick, Mildred
Nash, Loy Arthur
Neal, Joseph Walter
Newton, Thomas Hudson
Nicks, Samuel Freeman, Jr.
Osborne, Gladys Helen
Ough, Owen Keuieun
Owen, Frank Dearman
Parrish, Robert Clifton
Payne, Paul Pleasant
Peele, Talmadge Lee
Pitts, William Reid
Pleasants, Annie Mays
Poe, Henry Martyn
Pope, Liston Corlando
Power, Sara Jane
Presson, Harry L.
Ramseur, Jackson Townsend
Raper, Edward Shore
Rayle, John Leonard
Richardson, Nathan S., Jr.

Rodrigues, Andres Pollarco
Rogers, Helena Mojeska
Roper, Monte Christian Blalock
Roper, Richard Fred
Rosenburg, Nelson G.
Rosenstein, Ray R.
Rouse, Juanita Elizabeth
Sasser, Roxie Johnson
*Seabolt, Ruth
Severance, Willíam Ellis
Shipp, Mary Elizabeth
Shuford, Mary Opal
Simpson, Mary E.
Sink, Charles Varner
Sloan, William Stringfield
Smith, Amos Glenn
Smith, Edwin Hardin
Smith, May Alice
Spruill, Theodore Reynold
Stacy, Paul John
Stallings, Annie Elizabeth
Starnes, Alvin Bradley
Starnes, Shirley Judge
Starnes, Stoye Everette
States, Louis Alva, Jr.
Steidley, Maybeth Marie

Stewart, Burton Cloyden
*Stewart, Lilian Bridges
Summerrow, Thomas Edward, Jr.
Taylor, Helen Jackson
Taylor, Melvin H.
Tesh, Bessie
Thompson, Arthur Leo
Thompson, Eddie Lyon
Thornton, Thomas Spruill
Tilley, Lester A.
Van Wagoner, Willis Bush
Veasey, Paul David
Walker, Fielding Lewis
Weber, Pauline Susan
Werner, Margaret Louise
Westbrook, Dorothy Louise
Westbrook, Hugh Latimer, Jr.
White, John F., Jr.
Whitman, William Tate
Williamson, Glenn Irvin
Wilson, Eula Louise
Wilson, Lloyd Bain
Winchester, Ralph Lacy
Woodward, John Lisbon
Yarbrough, Edwin S., Jr.
Yountz, James Ernest

BACHELOR OF SCIENCE
Berglund, Charles William, Jr. Butler, Marshall Walker
Bevacqua, Frank Anthony Earnhardt, William Crawford
*Allen, Gay Wilson
Anderson, Ewing
Andrews, Robert Lee
Blake, Nelson Morehouse
Blalock, Sallie Verona
Britton, George Taylor
Broadway, Blanche McKinsey
Burch, James Charlie Horton
Carpenter, Clarence Ray
Carroll, Zoe Wells
Cheatham, Cora Lee
*Clark, Blanche Henry
Croy, Oakley Easley
Cunningham, Marcus Earl
Dehler, Sophie Anne
Ehrlich, John
Elliott, Emmet Roach
Fanning, Frederick Deveau
Garrison, Roy. Charles

\section*{MASTER OF ARTS}

Glasson, Lucy Pleming
Grigg, Claud
Haddock, Richard Abraham
*Hall, James Henry
Harriss, Hyman LeRoy
Ide, Walter Swetland
Jenkins, Wilbert Armonde
Johnson, Daniel Sloan
Kellam, William Porter
Ketring, Ruth Anna
Kirkpatrick, Charles Atkinson
Kolb, Ernest Connors
Little, Lawrence Calvin
McCain, James Allen
McCoy, Samuel Jesse
McCulloch, Thomas Logan
Matthews, Joseph Chesley
Morrisan, Harriet Newell
Pace, Donald Metcalf

Powell, Mary Ellen
Rayner, Kenneth Tyson
Rivera, Rodolfo Osvaldo
Robert, Joseph Clark
Rogers, Henry Harper
Rooker, Bessie Alice
Root, Raymond Williard
Runyan, Theodore
Schallert, Dorothy Amaryllys Spence, Charlotte Garrison Spivey, Lucy Mayo Stackhouse, Arva Eastwood Stem, Margaret Meadows

Stewart, Sara
Swanson, John Chester
Truesdale, James Nardin
Tyree, Elizabeth Davis
*Ward, Charles Eugene
*Watts, Hessie
Westerhof, Anthony Cornelius
Whaley, Grace Wine
Wheeler, Harold Payton
White, Gladys Ruth
Wiese, Marion Bernice
Wrenn, Samuel Nathaniel

MASTER OF EDUCATION
Nunn, Lilian Via
Whaley, Otis
*Edgerton, Roland Ottis
Forman, Eleanor Brynberg
BACHELOR OF DIVINITY
Fouts, Dwight Lang Phillips, James Godfrey
Herbert, Chesley Carlisle, Jr. Roberts, Ivan Leard
Huggin, James George, Jr. Southard, Paul Cornelius
Jerome, Robert Leroy Spence, Bessie Whitted
Kyles, Alpheus Alexander Stott, Janadus Doane
BACHELOR OF LAWS
Allshouse, Merle Lawrence Hollowell, Linwood Branton Branson, William Henry

Whisnant, Joseph Carpenter
DOCTOR OF PHILOSOPHY
Allen, Ivey, Jr., A.B., Duke.
Dissertation: Investigation of Isoquinoline Alkaloids: The Proposed Fritsch-Pomeranz Synthesis of Papaverine.

Davis, Rose May, A.B., A.M., Duke.
Dissertation: Investigation of Isoquinoline Alkaloids: Examination of Pictet's Berberine Synthesis.

Flanders, Ralph Betts, A.B., Emory; A.M., Duke.
Dissertation: Plantation Slavery in the State of Georgia.
Kumbro, Donald Milheim, B. S., The University of Buffalo; A.M., The University of Illinois.

Dissertation: The Possibility of Non-Toxic Lead Compounds.
Lackey, Oscar Napoleon, A.B., Valparaiso University; A.M., Duke.
Dissertation: Voltaic Cells with Oxidation-Reduction Electrodes.

\section*{APPOINTMENTS FOR COMMENCEMENT}

The chief marshal and manager for Commencement are selected by the Hesperian and Columbian Literary Societies. In the selection of these officers the societies alternate. The assistants are appointed by the chiefs.

\footnotetext{
*Degree conferred in absentia.
}

\title{
ROLL OF STUDENTS 1929-1930
}

\section*{GRADUATE STUDENTS}
[Nore: This list includes the names of all persons registered as graduate students during the twelve months preceding Commencement Day, June, 1930. The symbol ( S ) indicates that the student took part or all of his graduate courses in the Summer Session of 1929.]
Abernathy, Ethel Fuquay Springs, N. C.
A.E. (Duke), German.

Aiken, Leonora Marshall
A.B. (Duke), French. (S)

Akerstrom, Frances Elizabeth
A.B. (Maryville), Education, English. (S)

Alberson, Hazel Stewart
A.B. (Monmouth), Latin. (S)

Alexander, Thomas Robert
A.B. (Davidson), B.D. (Union, Richmond), Economics, Political Science.
*Altvater, Frederick Vernon
A.B. (Duke), Economics.

Anderson, Alice Francis
A.E. (Duke), Education. (S)

Anderson, Dorothy Henderson
A.B. (University of Tennessee), Psychology.

Anderson, Elizabeth Holt
A.B., A.M. (Duke), German. (S)

Anderson, Ewing Gainesville, Fla.
A.B. (University of Florida), A.M. (Duke), English.

Anderson, Mildred Everett
Durham, N. C.
A.B. (Marygrove), Psychology.

Ashburn, Karl Everett Handley, Tex.
A.B., A.M. (Texas Christian University), Economics.

Ashford, Moselle Quillian Athens, Ga.
A.B. (Florida State College for Women), A.M. (Clark), Psvchology.

Ashley, George Norman
Edenton, N. C.
A.B. (Wake Forest), Religion.

Atkins, Blanche Geneva Durham, N. C.
A.B. (Duke), English, Education.

Baker, Sudie Mae
A.B. (Duke), Education. (S)

Balch, Clifford Perry
Holly Springs, N. C.
A.B. (Franklin and Marshall), History, Political Science.

Baldwin, Evelyn Grayson Durham, N. C.
A.B. (Mary Baldwin), English, French.

Barker, Felix Scott
A.B. (Duke). Education. ( \(\mathrm{S}^{\prime}\) )

Barnes, Zelda Ralston
Durham, N. C.
A.E. (Greensboro College for Women), Education. (ऽ)

Barnette, Elizabeth
A.B. ( \(\mathrm{D} * \mathrm{k}=\) ). English. (S)

Barnhardt, Zeb Glenn
A.B. (Duke), Physics. (S)

\footnotetext{
*A.B. to be conferred June, 1930.
}

Barnhart, Frank Melton
A.B. (Emory and Henry), Religion, History.

Barrett, Dixon
A.B. (Duke), Education. (S)

Basler, Roy Prentice
A.B. (Central, Misscuri), English.

Bayne, Hazel Mae
A.B. (George Washington), English. (S)

Beasley, Blair Edward
A.B. (Duke), Education, English. (S)

Beavers, Hallie Siler City, N. C.
A.B. (North Carolina College for Women), Education.

Bell, Lila McLin Graham, N. C.
A.B. (North Carolina College for Women), English, Education. (S)

Bennett, John Wesley
A.B. (Duke), Religion. (S)

Best, Albert Hartwell, Jr.
A.B. (Wofford), Education, Economics. (S)

Bird, Matthew John
A.B. (Duke), History, Education. (S)

Bizzell, Alma Bridgers
A.B. (Salem), Education.

Blake, Nelson Morehouse Hyattsville, Md.
A.B. (George Washington), A.M.. (Duke), History.

Bowles, Charles Phillips
A.B. (Duke), Religion.

Boyd, Robert Edwin Fountain, N. C.
A.B. (University of North Carolina), Education. (S)

Bradford, Cathryne Monroe, N. C.
B.S. (William and Mary), Education, History. (S)

Bradshaw, Lucille Farrer Rocky Mount, N. C. B.S. (Virginia State Teachers College, Farmville). Education. (S)

Brady, Elbert Carl
A.B. (Elon), German. (S)

Brant, George Ezekiel A.B. (University of South Carolina), Mathematics. (S)

Brant, Helen Ward Bethune, S. C. A.B. (Coker), Economics, Education. (S')

Braswell, Helen Green Nashville, N. C. A.B. (North Carolina College for Women), Education. (S)

Braswell, John William Demopolis, Ala. A.B. (Duke), English.

Brecher, Gerhard Karl Adolf Otto Dresden, Germany (Gymnasium, Dresden), (University of Hamburg), Entany, Zoölogy.
Brẹnt, Fred Whaley
A.B. (Duke), Mathematics, History. (S)

Brewer, Ann Eliza
A.B. (Meredith), A.M. (Columbia).

Briñson, Pearl Leola
A.B. (Duke), French. (S)

Broadway, Blanche McKenzie
A.B. (Duke). History.

Brothers, Joe Jurden
A.B. (Duke), Education. (S)

Brown, Adrian Ernul
A.B. (Duke), Religion.

Brown, Maurine
A.B. (Baylor University), Education. (S')

Elon College, N. C.
Bethune, S. C.
Crimora, Va.
Durham, N. C.
Calhoun, Ky.
Washington, D. C.
Apex, N. C.

Concord, N. C.
Florence, S. C.
Chelsea, Mass.
Louisburg, N. C.

Guis
Guilford College, N. C.

Lynchburg, Va.
Raleigh, N. C.
Morehead City, N. C.
Durham, N. C.
Elizabeth City, N. C.
Bynum, N. C.
Cleburne, Tex.

Browning, Henry Donaldson
A.B. (Wake Forest), Education. (S)

Brummitt, Fred Graham
A.B. (Duke), Education. (S)
deBruyne, Jacob Marinus Anton
A.B. (Duke), Chemistry, Physics.

Buckner, Caney Edward A.B., A.M. (Duke), History. (S)

Burch, James Charlie Horton
A.B., A.M. (Duke), English, German, French.

Byrd, Ruth White
A.B. (North Carolina College for Women), English. (S')

Caldwell, Lawrence McClure
A.B. (Wake Forest), Zoology. (S)
\(\dagger\) Calhoun, Catherine Truss
A.B. (University of Richmond), Botany. (S)

Callihan, Alfred Dixon
A.B. (Marshall), Physics, Mathematics, Chemistry.

Canaday, Ernest Franklin
A.B. (William Jewell), A.M. (University of Missouri), Mathematics. (S)

Carpenter, David Williams Durham, N. C.
A.B., A.M. (Duke), Chemistry, Physics, Mathematics.

Carpenter, Edna May Durham, N. C.
A.B. (Duke), Education, English.

Carpenter, Virginia Magnolia
A.B. (Duke), Education. (S)

Carroll, Annie Lucille
A.B. (Salem), Education. (S)

Carroll, Charles Fisher, Jr.
A.B. (Duke), Education. (S)

Carroll, James Elwood A.B. (High Point), Religion.

Carroll, James Grover Wake Forest, N. C. A.B. (Wake Forest), M.A. (Columbia), Mathematics. (S)

Carroll, Zoe Wells \(\quad\) Morristown, Tenn.
A.B. (University of Tennessee), A.M. (Duke), Zoölogy, Psychology.

Caudill, Russell Horton
Durham, N. C. A.B., A.M. (Duke), Religion. (S)

Chen, William Yuanlung
Foochow, China
A.B., A.M. (Syracuse), Psychology, Philosophy.

Cherry, Jane Estelle Newton, N. C.
A.B. (Greensboro College), History, Education. (S)

Cherry, Julia Wyche Allen
Bahama, N. C.
A.B. (Duke), Education. (S)

Cherry, William John, Jr. Rock Hill, S. C. A.B. (Presbyterian College of South Carolina), English.

Chesley, Leon Carey Hop Bottom, Pa. B.S. (Susquehanna), Zoölogy, Botany, Chemistry.

Clark, Helen Dearmin High Point, N. C.
A.B. (Randolph-Macon), Religion, Philosophy.

Clark, Thomas Dionysius Louisville, Miss.
A.B. (University of Mississippi), A.M. (Universitv of Kentucky), History.

Clarkson, John Montgomery Heinemann, S. C.
A.B. (Wofford), A.M. (Duke), Mathematics. (S)

Clifton, Robert Marston Henderson, N. C.
B.S. (Davidson), English, History.

Colemañ, Thomas Rupert
A.B. (Duke), Rcligion. (S)

Conley, Donald Hayes
A.B. (Duke), Economics, History. (S)

Cook, Cecil Edwards
A.B. (North Carolina State College), Education.

Cooke, Lucy Gay
A.B. (North Carolina College for Women), Italian.

Cousar, Virginia
A.B. (Erskine), Economics, Education. (S)

Cowan, Sara Louise
A.B. (North Carolina College for Women), Education. (S)

Cox, Granville Claude
Fairfax, Va.
A.B. (William and Mary), Education, Mathematics. (s)

Cox, \(\underset{\text { B.S. (Emory), Mathematics, Physics. }}{ }\)
Cox, Rufus Carson Troy, N. C.
A.M. (University of North Carolina), Education. ( \((1)\)

Cox, Virginia Faye
A.B. (Converse), English.

Craig, J. Marie
A.B. (Winthrop), B.S. (Columbia), Education. (C)

Cross, Lethia Elizabeth
A.B. (Duke), Education. (S)

Cude, Wendell Holmes
A.B. (Guilford), Education, English. (S)

Currin, Gladys Gill
A.B. (Meredith), Education. (S')

Curtis, Ruth Evelyn
A.B. (Greet sboro College), History, English.

Cutter, Walter Aurey
A.B. (Central, Missouri), Religion, Philosophy.

Dail, Clara Jamesey Edenton, N. C.
A.B. (North Carolina College for Women), Education, Mrthematics. (S)

Daniels, Archie Shields
A.B. (Duke), Education. (S)

Daves, Guy
A.B. (Wake Forest), Education. (S)

Daves, Juanita Koontz
A.B. (North Carolina College for Women), Educ:tion. ( \(=\) )

Davidson, Elizabeth Huey
B.S., M.S. (University of Tennessee), History, Germa (s)

Davies, Clyde Thomson Radcliffe, Va.
A.B. (University of Florida), Education, English. (S)

Davis, Alberta Louise Zebulon, N. C.
A.B. (Greensboro Collcge), Education. (S)

Deán, Charles Wesley, Jr.
A.B. (Emory and Henry), Mathematics, Education. (今)

Deaton, Mary Moore Menry), Mathematics, Education. Mooresville, N. C.
B.S. (North Carolina College for Women), Educario..

Deniny, Mary Rebecca Red Springs, N. C.
A.B. (Salem), English, Education. (S)

Dickson, Dorothy Gene
A.B. (Rice Institute), Education. (S)

Dimmette, Joel Walter
A.B. (Duke). "eligion. (S)

Doob, Leonard William
A.B. (Dartmouth), Psychology, Zoölogy.

Shelbyville, Tenn.
Rockingham, N. C.
Lancaster, S. C.
Durham, N. C.
Colfax, N. C.
Angier, N. C.
Greensboro, N. C.
Baltimore, Md.

Leaksville, N. C.
Black Mountain, N. C.
Black Mountain, N. C.

Kingsport, Tenn.

Raleigh, N. C.
Leasburg, N. C.
New York, N. Y.

Drake, Virginia Helen
A.B. (Tusculum), Latin, Greek.

Dressel, Francis George
A.B. (Michigan State), M.S. (University of Michiran). Mrthematics.

Dunkle, Margaret Robert Bartow, Fla.
A.B. (Florida State College for Women), Latin, Greek.

Dunn, Maud Wilkerson Durham, N. C.
A.B. (Duke). Education. (S)

Dunn, Millard Charles
A.B. (Duke). Chemistry. (S)

Edgerton, Roland Ottis
A.B. Ed.M. (Duke), Education. (S)

Edwards, Nancy Irene
A.R. (Meredith), Education. (S)

Eggers, Graydon Poe
A.B. (Carson-Newman), English, French. (S)

Elliott, Emmet Roach
B.S. (Haninden-Sidncy), A.M. (Duke), Mathematics. (c)

Elmore, Kelly Lee
Lowell, N. C.
A.B. (Duke), Chemistry.

Fanning, Mamie Johnson
A.B. (Duke). Fiducation. (S')

Fennell, Richard Adams
Durham, N. C.
A.B. (Birmincham-Snuthern), Biology, Zoölogy.

Ferrell, George Washington Durham, N. C.
A.B. (Duke), A.M. (Columbia), English, Psycholocy.

Ferry, Lois Anne Riverside, Calif.
A.P. (University of California), German.

Fewell, Hall Steels
Charleston, S. C.
A.R. (Preshvterian College of South Carolina), Educttion. (C)

Fisher, Hilbert Adam
Raleigh, N. C.
Graduate of \({ }^{(\dot{S}}\), S. Naval Academy, M.S. (North Carolina State College).
Mathematice. (S)
Ford, Grover Mancil Hokes Bluff, Ala. B.C. (Daッ; คn), M.S. (Emory), Chemistry, Phvcics.

Fort, Elbert William Lumber Bridge, N. C. A.B. (Guilfnrd), Education, Religious Education. (S')

Frazier, Rose Marie Durham, N. C.
A.B. (Duke), German.

Fry, Glenn Ansel
A.B. (Davidson), Psychology, Zoölogy.

Garner, George Lee
Blacksburg, S. C.
A. \& M. College, Miss.
A.B. (Mississippi State College for Women), History. English. (ऽ)

Garrard, Annie Walker
Durham, N. C.
A.B. (Duke), History, Education.

Garrison, Albert L.
A.B. (Asbury College), Education. (S)

Gathings, James Anderson
Big Stone Gap, Va.
A.B. (Furman). Political Science, History. (S')

Gelmann, Herman Henry Brooklyn, N. Y. B.S. (Fordham), A.M. (Stanford), Chemistry, Physics.

Gentry, Nola Jane
A.B. (Duke), English. (S)

Gibson, William Marion
Greeneville, Tenn.
A.B. (University of Richmond), Political S'cience. History.

Gilbert, William Solomon Charleston, W. Va.
A.B., A.M. (University of Kentucky), History (S)

Gill, Harriet Aurelia
A.B. (University of Richmond), Zoölogy. (S)

Gill, Leila May
A.B. (Converse), Education, Latin (S)

Gillaspie, Athey Graves
B.S. (Lynchburg), Chemistry, Physics.

Gillet, Lucille Erma
A.B. (Nebraska Wesleyan), Psychology.

Gillock, Emmie May
A.B. (Mississippi State College for Women), Mathematics, Physics.

Glasson, Lucy Pleming
A.B., A.M. (Duke), English. (S)

Godard, James McFate
A.B. (Park), Education, Psychology.

Goodwin, Ernest Boyd
A.B. (Wofford), A.M. (University of North Carolina), History. (S)

Gordan, Myron Wilcox, Jr.
A.B. (Furman), Education. (S)

Gray, Theron Arthur
A.B. (Duke). History, Education. (S)

Green, Ernest Joshua
A.B. (Duke), English. (S)

Greene, Fred Woodside
A.B. (Duke), Biclogy. (S)

Gregory, George McKendrick
A.B. (Yale), A.M. (University of Texas), English

Griffin, Mabel Jeannette Durham, N. C.
A.B. (Duke), Mathematics, Physics. (S)

Grigg, Ivey Franklin
Berea, N. C.
A.B. (Duke), Education, Religious Education. (S')

Grogan, Eleanor
Stoneville, N. C.
A.B. (North Carolina College for Women), Educntion, English. (S)

Gunter, Ellen Mae
A.B. (Duke), English.

Haddock, Richard Abraham A.B., A.M. (Duke), Mathematics. (S)

Hagan, Charles Banner
Durham, N. C.
Durham, N. C.
Bristol, Tenn.
A.B. (Emory and Henry), A.M. (University of Virginia), Political Science, Economics.
Hall, Joseph Alfred Durham, N. C. A.B., M.S. (Wisconsin), Chemistry.

Haltiwanger, Robert Sidney
B.S. (Davidson), Education. (S)

Hardaway, Elizabeth Annie A.B. (Duke), Education. (S)

Harmon, Thomas Leonhardt A.B. (Emory), A.M. (University of Chicago), Economics, Education.

Harrell, Stanley Claudius
Durham, N. C.
A.B., A.M. (Elon), B.D. (Union, Richmond), Religion.

Harris, Clarence Ligon Anniston, Ala. A.B. (Wofford), Zoollogy. (S)

Harris, Florence Catherine Washington, N. C.
A.B. (Duke), History.

Harton, Benjamin Love Conway, Ark.
A.B. (Hendrix), Education, Economics, Pyschology.

Harvill, Richard Anderson Magnolia, Miss.
B.S. (Mississippi A. and M.), A.M. (Duke), Economics.

Harward, Morata Beatrice
A.B. (Duke), English. (S)

Hatchett, Edward Wallace
A.B. (Duke), Mathematics. (S)

Haywood, Zoa Lee
A.B. (Duke), English, Religion.

Hazlewood, Lucy Linwood
A.B. (Randolph-Macon Woman's College), Education, Mathematics.

Hazlewood, Willie Gertrude Kenbridge, Va.
A.B. (Randolph-Macon Woman's College), English. (S)

Henderson, Pierce Pike
Asheville, N. C.
A.B. (Presbyterian College of South Carolina), Education, Mathermatics. (S)

Henry, Nell Quinby
A.B. (Lander), Biology. (S)

Henry, Sibyl
A.B. (University of North Carolina), Education. (S)

Herndon, Clyde Ehrhardt, S. C.
A.B. (Furman), Education, History. (S)

Hester, Ernest Carrington
A.B. (Duke), Zoölogy, Botany.

Hewlett, Betty Herring
A.B. (Meredith), Education. (S)

Highfill, Thomas Guthrie
A. \(\mathrm{E}^{(M o r a v i a n), ~ R e l i g i o n . ~}\)

Hinson, Van Glenn
A.B. (Lenoir-Rhyne), Education. (S)

Hitt, Pearl
A.B. (Lander), Education, English. (S)

Hoban, Charles Francis
Ph.B. (Dickinson), English.
*Hobgood, Virginia Lucile
A.B. (Duke), Latin, French.

Hocutt, Naomi Hull
A.B. (Meredith), Education. (S)

Hodges, Wiley Edward
A.B. (Roanoke), Political Science, History.

Hodgkin, Wilbur Leroy
A.B. (Davidson), Education. (S)

Holt, Isaac Terry
A.B. (Duke), History, Political Science.

Holton, Samuel Martin
A.B., A.M. (Duke), Education. (S)

Hook, Marshall Ward Elon College, N. C. A.B. (Elon). M.A. (University of North Carolina), Mathematics. (S)

House, Ray Weldon
Cooleemee, N. C.
A.B. (Duke), Education. (S)

Howell, Thelma
A.B. (Duke), Zoölogy. (S)

Huckabee, Ellen Harris
A.B. (Duke), English.

Hudson, Monie Sanders
A.B. (Wofford), Chemistry, Physics.

Huff, Pauline
A.B. (Meredith). Education. (S)

Huffstetler, Juanita Elizabeth
Miami, Fla. A.B. (Florida State College for Women), Economics, History. (S')

\footnotetext{
* A.B. to be conferred June, 1930.
}

Hunt, Dwight Russell
Durham, N. C.
A.B. (Southeastern Teacher's College, Oklahoma). el, gion.

Hunt, Norman Francis Danville, Va.
A.B. (University of Pennsylvania), History.

Hunter, Annie May
Henderson, N. C.
A.B. (North Carolina College for Women), Education.

Hunter, John Everett Stem, N. C.

AB. (Wake Forest), Education. (S)
Israel, Kate Ola
A.B. (Duke), Chemistry.

Jackson, David Kelly, Jr.
A.B. (Duke), English, Education.

Jenkins, Sanford Swindell
A.B., A.M. (Duke), Chemistry, Physics.

Jenkins, Theodore Roosevelt
A.B. (Duke), Religious Education. (S)

Jennings, Frances Wardlaw
A.B. (Brenau), Zoölogy, Education. (S)

Jeter, Paul Hamilton, Jr.
A.B. (University of South Carolina), Education. (1)

Johnson, Joseph Herman
A.B. (University of Richmond), Education. (S)

Jordan, Patte
A.B. (North Carolina College for Women), Edur* n. (-)

Keever, Homer Maxwell
A.B. (Duke), Keligion.

Ketring, Ruth Anna
A.B. (Earlham), A.M. (Duke), History.

Kimball, Rosebud
A.B. (Elon). Education. (S)

Kimbrough, Edith
A.B. (Bessie Tift), Education, English.

Kluttz, Lillie Mae
A.B. (Duke), Education. (S)

Knight, John Vincent
A.B. (Elon), Religion, English. (S')

Knight, Mạry Latham
A.B. (Duke), Education. (S)

Kressin, Virginia Stanton
A.B. (University of South Dakota), Latin. (S)

Larsen, Edith
A.B. (Duke), Zoölogy. (S)

Leary, Rupert Leslie
A.B. (Furman), Education, English. (S)

Ledbetter, Frances Gresham
A.B. (Duke), English. (S)

Lee, Albert Evans
A.B. (Mercer), Education. (S)

Lee, Robert Earl
B.S., LL.B., M.A. (Columbia), Economics, History. ( \((\) )

Leggett, Mary Margaret
Edenton, N. C.
A.B. (Randolph-Mlicon Woman's College), Educatinn. (i)

LeGwin, Mary McCullen
A.B. (Duke), English. (S)
\(\dagger\) Leonard, Susan Francena
A.M. (Columbia), Botany. (S)

Asheville, N. C.
Gastonia, N. C.
Durham, N. C.
Durham, N. C.
Shelby, N. C.
Carlisle, S. C.
Mount Airy, N. C.
High Point, N. C.
Southmont, N. C.
Richmond, Ind.
Manson, N. C.
Greensboro, N. C.
Durham, N. C.
Durham, N. C.
Asheville, N. C.
Durham, N. C.
Durham, N. C.
Coronaco, S. C.
Princeton, N. C.
Monroe, N. C.
Kinston, N. C.

Wilmington, N. C.
Atlanta, Ga.

Levenson, Jacob
B.S. (New York), Chemistry, Physics.

Little, Harold Clay
A.B. (Davidson), Education, Mathematics. (S)

Little, Lawrence Calvin
A B (Davidson), AM. (Duke)
Long, Albert Anderson (Duke), Religion, Psychology, Durham, N. C.
A.B. (University of North Carolina), Education, Keligion. (S)

Lovelace, Arsola Crawford
A.B. (Wake Forest), Education. (S)

Lowder, Essie B.
B.S. (Queens), Zoölogy, Botany.
*Lucas, John Paul, Jr.
A.B. (Duke). Psychology, Religion, Zoollogy.

Lumley, Victor Alton
A.B. (Duke), French, English. (S)

Lynn, Irene Margaret A.B. (Duke), Zoology, Chemistry. (S)

McCarson, Anna Murray A.B. (Duke), Education. (S)

McCaskill, Leona Wilson
A.B. (Winthrop), Latin, Greek.

McCollum, Doris Elizabeth
A.B. (Winthrop). Education. (S)

McCulloch, Thomas Logan
A.B. (Whittier), Psychology, Zoölogy.

McDonald, Agnes Mae
A.B. (Salem), Mathematics, Education. (S')

McDonald, Claudia Anne
A.B. (Duke), Education. (S)

McDonald, Ralph Waldo A.B. (Hendrix). A.M. (Duke), Education. (S)

McEwen, Noble Ralph A.B. (Birmirgham-Southern), Education, Political Science.
\(\dagger\) MacGowan, William Leroy A.B. (Harvard), Botany. (S)

McKinnon, Sallie Lou A.B. (Randolph-Macon), English.

McMillan, Montague
A.B. (Limestone), A.M. (George Washington),

Mabry, William Alexander
A.B., A.M. (Duke), A.M. (Harvard), History.

Maden, William Leroy
A.B. (Tusculum), Spanish. (S)

Major, Charles Leslie A.B., A.M. (William and Mary), Education, Economics, Psvcholorv.

Manchester, Alan Krebs
A.B. (Vanderbilt), A.M. (Columbia), History.

Maness, Madison Ward
A.P. (Duke). Education. (S)

Mann, John William A.B. (Vircinin Military Institute), English.

Manning, John Eber R.C., M.S. (University of Arkansas), Education. (S)

Mansfield, Mamie A.B. (Duke), Education, Philosophy.

\footnotetext{
*A.B. to be conferred June, 1930.
\(\dagger\) Junaluska Summer School.
}

New York, N. Y.
Charlotte, N. C.
Durham, N. C.

Caroleen, N. C.
Albemarle, N. C.
Charlotte, N. C.
Durham, N. C.
Morrisville, N. C.
Durham, N. C.
Sumter, S. C.
Sumter, S. C.
Fullerton, Calif.
Paragould, Ark.
Lillington, N . C .
Winston-Salem, N. C.
Irondale, Ala.
Jacksonville, Fla.
Maxton, N. C.
Marion, S. C.
Enclich.
Ridgeway, N. C.
Jonesboro, Tenn.
Stormont, Va. Porto Allegre, Brazil
Rowland, N. C.
Cumberland, Md.
Jamesville, N. C.
Durham, N. C.

Marks, Ruby Genevieve
A.B. (Salem), Education, History. (S)

Martin, Lelia Virginia
A.B. (Westhampton), Education, English. (S)

Martin, Thomas Leon
A.B. (Duke), History, English. (S)

Matheson, William McRae
A.B. (Duke), Education. (S)

Mathews, Joseph Chesley
A.B. (Furman), A.M. (Duke), German. (S')
*Mathews, Joseph James
A.B. (Duke), History, Political Science.
*Mattox, William Reuben
A.B. (Duke), Economics, Political Science.

Maultsby, William DeVane
A.B. (Duke), Education. (S)

Meares, Jefferson Sullivan
B.S. (University of South Carolina), M.S. (North Carolina State College), Physics.
Merritt, Eglantine
A.B. (Greensboro College), French. (S)

Metler, Alvin Velbert
B.S. (Adrian), Chemistry, Physics.

Midgette, John Barker
A.B. (Duke), Education. (S)

Miller, Paul Jones, Jr.
B.S. (Mississippi A. and M.), Political Science,

Milner, Morris Edwin
A.B. (University of Richmond), Education. (S)

Montgomery, Margaret Elizabeth
A.B. (Duke), Engiish, French. (S)

Moore, John Watson
A.B. (Davidson). Education, Economics. (S)

Morehead, Charles Galloway
A.B. (Hendrix), English.

Morehead, Sara Frances
A.B. (Galloway Woman's College), English.

Morgan, John Wesley
A.B. (Duke), Education. (S)
*Morris, Esther Jane
A.B. (Duke), Zoölogy.

Morton, Catherine Serene
A.B. (Asbury), English. (S)

Moss, Sara Newbern
A.B. (Duke), Education. (S)

Mustard, Walter Edward
A.B. (Duke), Education, Mathematics. (S')

Myers, Rachel Edna
A.B. (Bridgewater), Psychology.

Nance, Jeannette
A.B. (Greensboro College), French, History. (S)

Neal, John Washington
A.B., A.M. (Duke), Education. (S)

Neely, Robert Russell
B.S. (Hampden-Sidney), French, Spanish. (S)

Nichols, Hugh Lester
A.B. (Duke), Religion. (S)
* A.B. to be conferred June, 1930.

Southern Pines, N. C.
Portsmouth, Va.
Durham, N. C.
Mt. Gilead, N. C.
Jacksonville, Fla.
Sardis, Ky.
Pen Hook, Va.
Council, N. C.
Raleigh, N. C.
Roxboro, N. C.
Adrian, Mich.
Hillsboro, N. C.
Meridian, Miss.
Economics.
Wilmington, N. C.
Burlington, N. C.
Winston-Salem, N. C.
Conway, Ark.
Conway, Ark.
Selma, N. C.
Raleigh, N. C.
Currie, N. C.
Forest City, N. C.
Mechanicsburg, Va.
Broadway, Va.
Asheville, N. C.
Durham. N. C.
Pamplin, Va.
Durham, N. C.

Nicholson, Maude L.
A.B. (Duke), French, History.

Noell, Lizzie Reade
A.B. (Duke), English.

Noell, Margaret Jeannette
A.B. (North Carolina College for Women), Education. (S)

O'Keeffe, Walter Fite Fort Wayne, Ind.
A.B. (Texas Christian), Political Science.

Pace, Donald Metcalf
B.S. (Susquehanna), A.M. (Duke), Zoölogy, Botany.

Page, Julian Bernice \(\quad\) Belmont, N. C.
A.B. (University of North Carolina), Education, History. (S)

Parkhurst, A. J.
B.S. (John B. Stetson University), Education. (S)

Parks, E. Taylor \(\quad\) Mulberry, Tenn.
A.B. (Carson-Newman), A.M. (University of Tennessee), History.

Patterson, John Clarke Uvalde, Tex.
A.B., A.M. (University of Texas), History.

Peacock, Serene Hooks Fremont, N. C.
A.B. (North Carolina College for Women), Education. (S')

Perry, Haywood Arnold Durham, N. C.
A.B. (Duke), Education. (S)

Pettigrew, Richard Campbell A.B. (Furman), A.M. (University of North Carolina), English, Greek, Latin. (S)
Petty, Clara Octavia
A.B. (Duke), Education. (S)

Plemmons, William Howard
A.B. (Wake Forest), History. (S)

Pool, Bob Lem
A.B. (Duke), Religion, Philosophy.

Poole, Frances
A.B. (North Carolina College for Women), Mathematics. (S)

Poole, Mae Johnson
A.B. (Flora Macdonald), Education. (S')

Powell, Gamaliel Wyatte Holmes
B.S., M.S. (Emory), Chemistry.

Powell, Margaret Alice
A.B. (Greensboro College), French, English.

Powell, Thomas Edward
A.B. (Elon), A.M. (University of North Carolina), Zoölogy.

Power, Sara Jane
A.B. (Duke), Education, Religion.

Pridgen, Lorraine Isley
A.B. (Duke), Education. (S)

Priepke, Rudolf Julius
B.S. (Elmhurst), Chemistry, Physics

Pritchett, William Kendrick
A.B. (Davidson), Greek, Latin.

Ratchford, Benjamin Ulysses
A.B. (Davidson), A.M. (Duke), Economics. (S)

Rawles, Ferald Alston
A.B. (Elon), Zoölogy. (S')

Rayner, Kenneth Tyson
A.B. (Wake Forest), A.M. (Duke), Mathematics, Education. (S)

Rees, Edward Jeffries Oxford, N. C.
A.B. (Asbury), B.D. (Boston), Religion.

Hanover, Pa .

Ocala, Fla.
Statesville, N. C.
Durham, N. C.
Durham, N. C.

Durham, N. C.
Florence, S. C.

Durham, N. C.
Asheville, N. C.
Lindale, Tex.
Lumberton, N. C.
Lumberton, N. C.
Newman, Ga.
Guilford College, N. C.
Elon College, N. C.
Paris, Ky.
Durham, N. C.
Clarksville, Ia.
Atlanta, Ga.
Gastonia, N. C.
Suffolk, Va.
Wake Forest, N. C.

Reeves, Ruby Edith
A.B. (Duke), French. (S)

Reitzel, Charles Hidden
A.B. (Lenoir-Rhyne), Education. (S)

Riley, Eunice Williams
A.B. (Duke), Education, Mathematics. (S)

Rivera, Rodolfo Osvaldo
A.B. (Southwestern Louisiana Institute), A.M. (Dıke), History (S)

Roberts, Cortelyou John Asheville, N. C.
B.S., M.S. (North Carolina State College), French. ( \(\varsigma\) )

Roberts, Margaret Charlotte
A.B. (Elon), English.
*Robertson, Emma Laura
A.B. (Duke), English, Philosophy.

Robinson, Boyd B.
A.B. (Lenoir-Rhyne), Education. (S')

Rodriguez-Diago, Andres
A.B. (Duke). Z.ölogy, History. (S)

Root, Raymond Willard
A.B. (Milton), A.M. (Duke), Zoölogy.

Ross, Jennings
A.B. Greensboro College), Education. (S)

Royall, John Edward
A.B (Charleston), Education. (S)

Sain, Lodena
A.B. (North Carolina College for Women), Education. (S)

Sanderson, Jesse Ormond
A.B. (Duke), Education, Economics. (S')

Sasser, Roxie Johnson
A.B. (Duke), English, Education. (S)

Sawyer, Roma Elizabeth Durham, N. C. A.B. (Duke), A.M. (University of Pennsylvania), Political Science, Economics.
Saylor, John Henry Fredericktown, Mo.
A.B. (Southern Methodist University), A.M. (Duke), Chemistry.

Schallert, Dorothy Amaryllys
Winston-Salem, N. C. A.B., A.M. (Duke), Zoollogy, Botany.

Scott, Lois Collins A.B. (Duke), Education. (S)

Seabolt, Louise A.B. (Duke), A.M. (Columbia), History.

Seay, Hibernia Selma, Ala. A.B. (Randolph-Macon), French, English, History.

Seeley, Emetta Meed Durham, N. C. A.B. (Connecticut College for Women), Religion, History.

Sessoms, Louise Elizabeth A.B. (Duke), Religion. (S)

Shafer, Julia Simpson A.B. (Emory and Henry), English. (S)

Sharkey, William Kenneth A.B. (DePauw), A.M. (Brown), Economics, Psychology.

Shaw, Thomas Jackson, Jr. Greensboro, N. C. A.B. (Duke), English.

Shipp, Elsie P. A.B. (Meredith), French, Education. (S)

\footnotetext{
*A.B. to be conferred June, 1930.
}

Shipp, Mary Elizabeth A.B. (Duke). Zoölogy. (S)

Shuford, Bessie Crocker A.B. (Limestone), Education. (S)

Simpson, William Hays Frederick, Md. A.B. (Tusculum), A.M. (Duke), Political Science, History.

Slayden, Milton A.B. (Trinity), Education. (S)

Smith, Cecil Cline Durham, N. C.
Sm. A.B. (University of North Carolina), Education. (S)
Smith, Culver Haygood Pittsburgh, Pa.
A.B. (Duke), A.M. (Yale), History.

Smith, Hugh Preston
A.B. (Wake Forest), A.M. (Duke), Education. (S)

Smith, Robert Sidney
Smith, Sarah Olive
A.B. (Guilford), Education. (S)

Snapp, Elizabeth
A.B. (University of Kentucky), English. (S')

Snuggs, Henry Lawrence
A.B. (Wake Forest), A.M. (Duke), English.

Southerland, Bessie Juanita
A.B. (Duke), English. (S)

Sowell, John Pierce
A.B. (Furman), Education. (S)

Spikes, Lewis Everett A.B. (Duke), Education. (S)

Stackhouse, Arva Eastwood
A.B. (Franklin), A.M. (Duke), History.
*Stalvey, James Benjamin A:B. (Duke), History, Political Science.
Starling, Mary Lee A.B. (Greensboro College), English, History. (S)

Starnes, Alvin Bradley A.B. (Duke). Education, English. (S)

Staton, Ennis Calvin A.B. (Wake Forest), Education. (S)

Stephens, Hubert Wesley Macomb, Ill. B.S. (Illinois Wesleyan), Physics, Mathematics, Chemistry.

Stewart, Luna Agnes
Ogden, Fla. A.B. (Florida State College), English, History. (©)

Stokes, Ruth Wyckliffe Mountville, S. C. A.B. (Winthrop), M.A. (Vanderbilt), Mathematics. Physics. (S)

Stone, Alta Ruth A.B. (Duke), Education.

Stough, Theodore Elias A.B. (Duke). Education, Religion. (S)

Strother, Eura Vance
A.B. (Duke), Education. (S)

Strother, Melissa Adelle A.B. (Duke). Latin. (S)

Stutts, DeWitt Talmage A.B., A.M. (Duke), Education. (S)

Styron, Gertrude Mars Davis, N. C A.B. (East Carolina Teachers College), Education, French. (S)

\footnotetext{
*A.B. to be conferred June, 1930.
}

Sugden, Herbert Wilfred
A.B. (Harvard), A.M. (Duke), English.

Swaringen, Roy Archibald
A.B. (Duke), Education. (S)

Sydnor, Elmer Williams
A.B. (Richmond), A.M. (Columbia), English.

Taylor, Waller Littlepage, Jr.
A.B. (Duke), Chemistry, Biology. (S)
\(\dagger\) Teeter, Marvin Frank
A.B. (Duke), Botany. (S')

Thomas, John Frederick
A.B., A.M. (University of Michigan), Psychology.

Thompson, Lacy Hunter Haw River, N. C.
A.B. (Asbury), Religion. (S)

Tillery, Doris Katherine
A.B. (Meredith), Mathematics.

Tilley, Ernest Clarence
A.B. (Duke), History. (S)

Tilley, Nannie Mae
A.B. (North Carolina College for Women), History. (S)
'ripton, Samuel Ridley
A.B. (Mercer), Zoölogy, Chemistry.

Torrey, Annie Laurin
A.B. (Mississippi State College for Women), German. (C)

Trentham, Ina Rankin
A.B. (Carson-Newman), French, History.
\(\dagger\) Trentham, Shannon Otis
B.S. (Carson-Newman), Botany, Zoölogy. (S)
deTreville, Marie
A.B. (Winthrop), Education.

Trueblood, Paul Graham
A.B. (Willamette), English, Finilosophy.

Turner, Dorothy Dorman
A.B. (Greensboro College), French, Education. (:)

Tyson, Marie Harris Mebane, N. C.
A.B. (North Carolina College for Women), Education. (S)

Umstead, Lucy Waller
A.B. (Duke), Education. (S)

Underwood, Eugene Taylor
A.B. (Butler), French, History, Psycholcgy.

Underwood, Paul Benjamin
A.B. (Furman), Education. (S)

Wall, Reid
B.S., B.D. (Emory), Religion, Psychology.

Walston, Rosa Lee
A.B. (Woman's College, Alabama), M.A. (Birmingham-Southern), M.A. (Columbia) English.
Wannamaker, Elizabeth Bates
A.B. (Winthrop), Education, English. (S)

Ward, Carrie Mae
A.B. (East Carolina Teachers College), French.

Ward, Charles Eugene
A.B. (Baker), A.M. (Duke), English.

Ward, Claude
B.S. (Wake Forest), Education. (S)

Asheville, N. C.
Oxford, N. C.
Jefferson City, Tenn.
Stovall, N. C.
Mt. Pleasant, N. C.
Detroit, Mich.

Scotland Neck, N. C.
Durham, N. C.
Bahama, N. C.
Macon, Ga.
Union Church, Miss.
Mars Hill, N. C.
Mars Hill, N. C.
Walterboro, S. C.
Roseburg, Oregon
Elizabeth City, N. C.

Durham, N. C.
Indianapolis, Ind.
Greer, S. C.
Gibsonville, N. C.
Birmingham, Ala.

High Point, N. C.
Seven Springs, N. C.
(S)

Wellsville, O.
Elizabeth City, N. C.

\footnotetext{
\(\dagger\) Junaluska Summer School.
}

Warren, Alice Cain
A.B. (Winthrop), Education. (S)

Warren, Marion
A.B. (Duke), Education. (S)

Warrick, Edward
A.B. (University of North Carolina), Education, History. (S)

Welch, Elizabeth
Norfolk, Va.
A.B. (Greensboro College), Education, Latin. (S')

Westerhof, Anthony Cornelius
Holland, Mich. A.B. (Calvin), A.M. (Duke), Psychology, Philosophy.

Whaley, Grace Wine
A.B. (Carson-Newman), A.M. (Duke), English.
Whaley, Otis
Fordtown, Teny.
Fordtown, Tenn,
B.S. (East Tennessee State Teachers College), Ed.M. (Duke), History

Wheeler, Harold Peyton Durham, N. C.
A.B. (Wofford), A.M. (Duke), English. (S)

White, Joseph Benton
A.B. (Wofford), Education. (S)

White, Sara Pitzer
A.B. (Flora Macdonald), Education. (S)

Whitman, William Tate
A.B. (Duke), Political Science, History. (S)

Wiggins, Ruth Alford
Centenary, S. (:
Mount Gilead, N. C.
Boaz, Ala.
Wilson, N. C. A.B. (North Carolina College for Women), Education. (S)

Wilkerson, Beulah Ruth
A.B. (Duke), Education. (S)

Wilkerson, Starling Dwight
A.B. (Duke), Education, History. (S)

Wilkins, Margaret Moring
A.B. (Elon), English, Education. (S)

Williams, Bettie Neal AB. (North Carolina College for Women), French, English. (S)
Williams, Harold Fish Ladysmith, Wis. Ph.B. (University of Wisconsin), Botany, Zoollogy.
Williams, Harvey Page Brookneal, Va.
A.B. (William and Mary), Mathematics. (S)

Williams, Winona
A.B. (Greensboro College), English. (S)

Williamson, Francis Marvin
A.B. (Duke), Education. (S')

Wilson, Dorothy Estelle
A.B. (Duke), Education, Zoölogy. (S)

Wilson, Elizabeth Gladys
A.B. (Duke), Education. (S)

Wilson, Jessie Lillian
B.S. (University of Tennessee), Education.
\(\dagger\) Winslow, Effie Mae
A.B. (Earlham), Botany. (S)

Womack, John Gamble
W. Durham, N. C.

Kenly, N. C.
Durham, N. C.
Morehead City, N. C.

Mount Airy, N. C.
Durham, N. C.
Durham, N. C.
Durham, N. C.
Lenoir, N. C.
Greenville, N. C.
Rogers, Ark. A.B. (University of Arkansas), Chemistry, Physics.

Woodson, Mary Eliza Lynchburg, Va. A.B. (Greensboro College), Economics, Education. (S')

Woody, Robert Hilliard
Louisville, Ky. Ph.B. (Emory), A.M. (Duke), History.
Wynne, Lemuel Bruce
A.B. (Duke), Education. (S)

\footnotetext{
\(\dagger\) Junaluska Summer S'chool.
}


\section*{SCHOOL OF RELIGION STUDENTS}

\section*{SENIOR CLASS}

Acey, Archie Everette
A.B., Randolph-Macon College, 1927.

Barclift, Chancie DeShield
A.B., Duke University, 1927.

Branton, Razzie Ray
A.B., Millsaps College, 1927.

Caudill, Russell Horton
A.B., Duke University, 1927.

Crutchfield, Henry Ervin
A.B., Elon College, 1926.

Cunningham, Marcus Earl
A.B., University of Arkansas, 1927.
A.M., Duke University, 1929.

Davis, Harvey Laudis
A.B., Duke University, 1921.

Dawson, Robert Grady
A.B., Duke University, 1927.

Edwards, Earl Bowling
A.B., Duke University, 1928.

Funk, Sherwood William
A.B., Morris Harvey College, 1925.

Gist, Joseph Andrew
A.B., East Central State Teachers College, 1927.

Green, Charles Sylvester
A.B., Wake Forest College, 1922.
A.M., Duke University, 1924.

Guice, John Asa
A.B., Hendrix College, 1927.

Holler, Adlai Cornwell
A.B., Wofford College, 1921.

LL.B., University of South Carolina, 1925.
House, Robert Lee
A.B., Duke University, 1928.

Johnson, Hugh Hanna
A.B., The College of William and Mary, 1924.

Jones, Alvin Adelbert
A.B., Allegheny College, 1927.

Keever, Homer Maxwell
A.B., Duke University, 1923.

Lawrence, Marquis Wood
A.B., Duke University, 1925.

Chatham, Va.
Durant's Neck, N. C.
Hathorn, Miss.
Durham, N. C.
Henderson, N. C.
Fayetteville, Ark.
Durham, N. C.
Greensboro, N. C.
Durham, N. C.
Charleston, W. Va.
Winnsboro, Tex.
Durham, N. C.
Conway, Ark.
Rock Hill, S. C.
Franklinton, N. C.
Zuni, Va.
Bemus Point, N. Y.
Lewisville, N. C.
New Bern, N. C.

McCastlain, Morris Sheppard
Ph.B., Emory University, 1927.
McLarty, James Brown
A.B., Duke University, 1927.

Nelson, Fletcher
A.B., Hendrix College, 1927.

Rainey, Lawyer James
A.B., Duke University, 1926.

Rowe, Doyle Thomas
A.B., University of Arkansas, 1927.

Russell, Leon
A.B., Hendrix College, 1927.

Shell, William Frank
A.B., Hendrix College, 1926.

Terrell, James Milas
A.B., Emory and Henry College, 1894.
B.D., Vanderbilt University, 1897.

Thompson, Lacy Hunter
A.B., Asbury College, 1927.

Thornburg, J. Lewis
A.B., Lenoir-Rhyne College, 1920.

Waggoner, Albert Crews
A.B., Duke University, 1927.

Whitford, William Edward
A.B., Duke University, 1927.

Womack, Carlos Poynor A.B., University of Arkansas, 1927.
middLe Class
Allen, Robert James
B.S., Citadel, 1925.

Ashley, George Norman
A.B., Wake Forest College, 1928.
*Averitt, Vernon Geddie
A.B., Southern College, 1930

Baker, Cecil Alexander
A.B., Lambuth College, 1928.

Barnhart, Frank Melton
A.B., Emory and Henry College, 1926.

Bowles, Charles Phillips
A.B., Duke University, 1928.

Brown, Adrian Ernul
A.B., Duke University 1916.

Brown, Robert Edgar
A.B., Southwestern University, 1920.

Bruton, Robert Bradley
A.B., Duke University, 1929.

Carroll, James Elwood
A.B., High Point College, 1928.

Chalfant, Vernon Elmer
A.B., Millsaps College, 1926.

Clark, Helen Dearmin
A.B., Randolph-Macon Woman's College, 1928.

Clegg, William Lemuel
A.B., Duke University, 1924.

Holly Grove, Ark.
Charlotte, N. C.
Helena, Ark.
Durham, N. C.
Liberty, N. C.
West Helena, Ark.
Rosston, Ark.
Durham, N. C.
Haw River, N. C.
Durham, N. C.
Walkertown, N. C.
Vanceboro, N. C.
Rogers, Ark.

Greeleyville, S. C.
Edenton, N. C.
Groveland, Fla.
Jackson, Tenn.
Crimora, Va.
Guilford College, N. C.
Bynum, N. C.
Durham, N. C.
Candor, N. C.
Reidsville, N. C.
Augusta, Ark.
High Point, N. C.
Garner, N. C.

\footnotetext{
- The degree of Bachelor of Arts will be conferred in June, 1930.
}

Coleman, Thomas Rupert
A.B., Duke University, 1928.

Cutter, Walter Airey
A.B., Central College, 1928.

Grigg, Womble Quoy
A.B., Duke University, 1923.

Harris, Loy Vernon
A.B., Duke University, 1924.

Highfill, Thomas Guthrie
A.B., Moravian College, 1928.

Hunt, Dwight R.
A.B., Southeastern State Teachers College, 1928

Jordan, Frank Booe
A.B., Duke University, 1927.

Kale, William Arthur
A.B., Duke University, 1925.

Kincheloe, Marvin Smith
A.B., Emory and Henry College, 1925.

Knight, John Vincent
A.B., Elon College, 1915.

Mayo, Louis Allen
A.B., Duke University, 1928.

Minga, Taylor Herbert
A.B., Birmingham-Southern College, 1928.

Murphy, Hugh Edwin
A.B., George Washington University, 1928.

O'Kelly, Walter Vernon
A.B., McMurry College, 1926.

Rowland, John Lester
A.B., Hendrix College, 1926.

Sessoms, Louise Elizabeth
A.B., Duke University, 1926.

Shuller, Edgar Ralph
A.B., Hendrix College, 1925.

Shumaker, Ralph Baxter
A.B., Duke University, 1928.

Tilley, Lester Archie
A.B., Duke University, 1929.

Walton, Aubrey Grey
A.B., Hendrix College, 1928.

Wilkinson, Jesse Giles
A.B., Duke University, 1927.

Yountz, James Ernest
A.B., Duke University, 1929.

JUNIOR CLASS
*Andrews, Chester James
A.B., Duke University, 1930.

Atkinson, Samuel Marvin
A.B., Wofford College, 1929.

Austin, Hugh Stewart
A.B., University of Florida, 1929.

Barbee, Carl Webster
B.S., Wake Forest College, 1927.

Barnwell, Roy James
A.B., Duke University, 1929.

Barringer, Emma Blanche
A.B., Duke University, 1922.

Durham, N. C.
Baltimore, Md.
Lawndale, N. C.
Elon College, N. C.
Donnoha, N. C.
Vinita, Okla.
Salisbury, N. C.
West Asheville, N. C.
Church Hill, Tenn.
Durham, N. C.
Durham, N. C.
Nettleton, Miss.
Durham, N. C.
Abilene, Tex.
Harrison, Ark.
Fuquay Springs, N. C.
Ozark, Ark.
Salisbury, N. C.
Hurdle Mills, N. C.
Helena, Ark.
Sherrill's Ford, N. C.
Southmont, N. C.

Fairmont, N. C.
Mullins, S. C.
Orlando, Fla.
Seven Springs, N. C.
Hendersonville, N. C.
Norwood, N. C.
*Boone, Daniel Clifton
A.B., Elon College, 1930.

Braxton, Jabus Walter
A.B., High Foint College, 1929.

Brown, Cansau Delane
A.B., Duke Úniversity, 1929.

Carper, John Howard
A.B., Duke University, 1929.

Carruth, John Robert
A.B., Emory and Henry College, 1929.

Clay, Charles Wesley
A.B., Duke University, 1929.

Cooke, Paul
A.B., Birmingham-Southern College, 1926.

Council, Raymond Ward
A.B., Lambuth College, 1929.

Dimmette, Joel Walter
A.B., Duke University, 1928.

Edens, Lacy Thomas
A.B., Duke University, 1924.

Edwards, Moir Williamson
A.B., Duke University, 1929.

Erwin, McKinley Gladstone
A.B., Duke University, 1923.

Fields, Paul Henry
A.B., Duke University, 1927.

George, LeRoy Brunson
A.B., Wofford College, 1929.

Greenwood, Lawrence Henry
A.B., Emory and Henry College, 1929.

Grisham, Roy Arnold
A.B., Millsaps College, 1928.

Harbin, Andrew Vandiver, Jr.
A.B., Wofford College, 1929.

Hardin, Harvey McConnell
A.B., Southern College, 1929.
*Hathaway, Offie Lemuel
A.B., Duke University, 1930.

Hillman, Carden Adams
A.B., Emory and Henry College, 1924.

Hood, George Franklin
A.B., Duke University, 1928.

Hunt, Ruth Eberly
A.B., Southeastern State Teachers College, 1929.

Larkin, Leon Crawford
A.B., Duke University, 1917.

Nalls, Frank Russell, Jr.
A.B., Mercer University, 1923.

Pegg, Jabez Paul
A.B., University of North Carolina, 1926.

Rainey, Irene Hurst
A.B., Duke University, 1926.

Sanford, Marshall Stanfield
A.B.. Lambuth College, 1929.

Shankle, Byron
A.B., Duke University, 1923.

Suffolk, Va.
Snow Camp, N. C.
Traphill, N. C.
Rowland, N. C.
El Paso, Tex.
Winston-Salem, N. C.
Cullman, Ala.
Union City, Tenn.
Graham, N. C.
Durham, N. C.
Guilford College, N. C.
Cedar Falls, N. C.
Raleigh, N. C.
Independence, La.
Roanoke, Va.
Wheeler, Miss.
Mullins, S. C.
Lakeland, Fla.
Middlesex, N. C.
Bristol, Tenn.
Vale, N. C.
Farris, Okla.
Durham, N. C.
Monroe, N. C.
Stokesdale, N. C.
Durham, N. C.
Elbridge, Tenn.
Durham, N. C.
*The degree of Bachelor of Arts will be conferred in June, 1930.

Sharp, Eron Malcolm
A.B., Millsaps College, 1927.

Sharpe, Ralph McDuffie
A.B., Wofford College, 1927.

Singleton, George Harbin, Jr.
A.B., Birmingham-Southern College, 1929.

Stafford, George Reid
A.B., Emory and Henry College, 1925.

Thompson, Arnold Chester
A.B., Taylor University, 1924.
*Varner, Robert Milton
A.B., Duke University, 1930.

Williams, Atticus Morris
B.S., Nortn Carolina State College, 1921.

Williamowsky, Chaim
A.B., Jewish Rabbinical Seminary.

Williams, Benjamin Truman
A.B., Hendrix College, 1928.

Wilson, Raymond
A.B., Lambuth Coilege, 1929.

Wolverton, Wallace Irving
A.B., Park College, 1926.

Vernon, Tex.
Gilbert, S. C.
Birmingham, Ala.
Abingdon, Va.
Hillsboro, N. C.
Thomasville, N. C.
Erwin, N. C.
Durham, N. C.
Ozark, Ark.
Kerrville, Tenn.
Bristow, Okla.

\section*{JUNALUSKA SCHOOL OF RELIGION}

Alexander, William Marvin
A.B., Central College, 1906.

Deans, Nettie Allen
A.B., North Carolina College for Women, 1895.

Edens, Lacy Thomas
A.B., Duke University, 1924.

Edwards, Earl Bowling
A.B., Duke University, 1928.

Edwards, James Smiley
A.B., Wofford College, 1917.

Ferguson, Mary P.
Giles, William Howard
A.B., Wofford College, 1917.
B.D., Emory University, 1918.

Gist, Joseph Andrew Stem, N. C.
A.B., East Central State Teachers College, 1927.

Henry, Freddie Elizabeth
A.B., Columbia College, 1922.
M.A., Northwestern University, 1925.

Holler, Martha Miller Rock Hill, S. C.
A.B., Winthrop College, 1926.

Jenkins, Theodore Roosevelt
A.B., Duke University, 1927.

Kale, William Arthur
Kent, Juanita Ray
Kilgore, J. B.
A.B., Newberry College, 1900.

Kincheloe, Marvin Smith
A.B., Emory and Henry College, 1925.

Kirk, Edward Love
A.B., Emory and Henry College.

Fayette, Mo.
Charlotte, N. C.
Waynesville, N. C.
Durham, N. C.
Greenville, S. C.
Nashville, Tenn.
New Orleans, La.

Nashville, Tenn.

Durham, N. C.
West Asheville, N. C.
Waxahachie, Tex.
Pickens, S. C.
Farmer, N. C.
High Point, N. C.
*The degree of Bachelor of Arts will be conferred in June, 1930.

Lander, Carrie Parchen
A.B., Lander College, 1908.

Lewis, Frank Eugene
A.B., Bethel College, 1883.
A.M., Bethel College, 1887.

Liddell, Lola Elizabeth
A.B., Wesleyan College, 1915.

Mann, Sue Belle
A.B., Texas Woman's College, 1922.
A.M., Southern Methodist University, 1925.

McDonald, Elizabeth Jane
A.B., University uf wouth Carolina, 1908.
A.M., University of South Carolina, 1926.

McRae, Fay
A.B., Galloway College, 1901.

Neill, Eleanor Byers
A.B., Galloway College, 1897.
B.S., George Peabody College, 1916.
A.M., George Pentody College, 1920.

Nesbitt, Charles Franklin
A.B., Wofford College, 1922.
B.D., Emory University, 1926.

Nevitt, Robert Kern
Randolph-Macon College.
Patten, Walter
A.B., Wesleyan University, 1907.
A.M., University of North Carolina, 1916.

Powell, Paul Shell
A.B., Vanderbilt University, 1910.
A.M., Vanderbilt University, 1913.
B.D., Vanderbilt University, 1913.

Rhinehart, David Horace
Rice, Percy Gordon
A.B., Birmingham-Southern College, 1925.

Sanford, Glenn F.
A.B., Hendrix College, 1924.

Seissinger, Valdora Joyce
A.B., Lambuth College, 1927.

Sigmon, Paul C.
A.B., Lenoir-Rhyne College, 1918.
A.M., University of South Carolina, 1921.
B.D., Lutheran Southern Seminary, 1921.

Spratt, Barnett
Winthrop College.
Van Hooser, Ruby Merritt
A.B., Athens College, 1913.

Winn, Annie Maria
A.B., Wesleyan College, 1891.

Wolverton, Wallace Irving
A.B., Park College, 1926.

Pelzer, S. C.
Louisville, Ky.

Atlanta, Ga.
Handley, Tex.
Columbia, S. C.
Little Rock, Ark.
Batesville, Ark.

Jackson, Miss.
Washington, D. C.
New Bern, N. C.
Hopkinsville, Ky.

Cliffside, N. C.
Albertville, Ala.
Conway, Ark.
Memphis, Tenn.
Granite Falls, N. C.

Chester, S. C.
Orlando, Fla.
Savannah, Ga.
Bristow, Okla.

\title{
SCHOOL OF LAW STUDENTS
}
\begin{tabular}{ll} 
& First year \\
Alexander, Ernest Raymond & \\
Candler, Coke & Goldston, N. C. \\
Caruthers, Joseph Tinnie, Jr. & Candler, N. C. \\
Edwards, Mark & Greensboro, N. C. \\
Hannah, Hamnah, Jr. & Asheville, N. C. \\
Horton, James Everett & Rocky Mount, N. C. \\
Johnson, Robert Wade & Durham, N. C. \\
Johnston, Robert Multon & Apex, N. C. \\
Minneci, Ernest & Farmville, N. C. \\
Nicks, Samuel Freeman & Pittsburgh, Pa. \\
Reynolds, Horace Taylor & Hillsboro, N. C. \\
Robbins, Henry Haywood, Jr. & Malone, N. Y. \\
Sanders, George Washington & Granite Falls, N. C. \\
Scott, Clifford G. & Tampa, Fla. \\
Simon, William Alexander & Durham, N. C. \\
Swanson, Paul & Wilmington, N. C. \\
Swift, Charles David & Lexington, N. C. \\
& Greensboro, N. C.
\end{tabular}

\section*{SECOND YEAR}

Billings, Robert Bruce
Borland, A. H.
Burton, Clarence Vernon, Jr.
Colonna, Shep W.
Conner, Emmett Lewis
Crowson, M. C., Jr.
Davis, Lee F.
Erwin, Paul R.
Hester, Hanselle L.
Johnston, Walter E., Jr.
King, Jennings G.
McDougle, H. I.
Newton, N. B.
Pearson, R. R.
Saint Amand, Claude Emile, Jr.
Scurry, Claude S.
Stoner, Paul Glenn,
Wyche, Brooks Parham
Durham, N. C.
Durham, N. C.
Norfolk, Va.
Charlottesville, Virginia
Johnson City, Tenn.
Durham, N. C.
Waynesville, N. C.
Charlotte, N. C.
Winston-Salem, N. C.
Winston-Salem, N. C.
Laurinburg, N. C.
Durham, N. C.
Greenville, S. C.
Rocky Mount, N. C.
Wilmington, N. C.
Hendersonville, N. C.
Southmont, N. C.
Dabney, N. C.

\section*{THIRD YEAR}

Butler, Lester Clagett
Chappell, Louis Vernon
Finch, William Atlas, Jr.
Durham, N. C.
Elizabeth City, N. C.
Wilson, N. C.

Garriss, Garland Smith
Gatling, William Illingworth
Jones, Vernie Okle
Guthrie, Mercer Wall
Nail, Lonnie Emerson
Norris, Jesse Allen
Sanders, Emerson Thompson
Sink, John Moyer, Jr.
Strickland, Hector Paul
Troy, John Clark
Wallace, John Whitlock
Wilson, Max Clyde

Margarettsville, N. C.
Norfolk, Va.
Weaverville, N. C.
Durham, N. C.
Winston-Salem, N. C.
Fort Pierce, Fla.
New Iberia, La.
Greensboro, N. C.
Dunn, N. C.
Durham, N. C.
Statesville, N. C.
Charlotte, N. C.

\section*{STUDENTS IN TRINITY COLLEGE}

\section*{SENIOR CLASS}

Abbott, Charles Francis
Allen, Thomas Ellis
Allison, Clyde
Altvater, Frederick Vernon
Anderson, Lacy Waverly
Andrews, Chester James
Andrews, Robert Skeen
Arons, Edward Maurice
*Ashworth, Rufus Charles
Barker, Thomas Ralph
*Barnette, Texie Elizabeth
*Barnwell, Myrtle Carpenter
Baughman, Burr Hastings
Beall, Edward Leyburn
Beall, Martin Grogan
Bell, Florence Evelyn
Bennett, Margaret Virginia
Best, Farquhard Smith
*Biggs, Charles Grayson
Biggs, William Campbell
Blalock, Claiborne Cheatham
Book, Abraham Benjamin
Booth, William Robert
*Boothe, Elther Louise
Brawley, Jeter Burkett
Bridgers, Arthur Dooley
Brintle, Joe Howard
Brock, Theron Burdick
Budd, William Pritchet

Hingham, Mass.
Durham, N. C.
Yanceyville, N. C.
Denver, Colo.
Halifax, Va.
Fairmont, N. C.
Mount Gilead, N. C.
New York, N. Y.
Winter Park, Fla.
Spencer, N. C.
Woodsdale, N. C.
Durham, N. C.
Hendersonville, N. C.
Durham, N. C.
Durham, N. C.
Rocky Mount, N. C.
Blackstone, Va.
Dunn, N. C.
Lillington, N. C.
Wilmington, N. C.
Durham, N. C.
Asheville, N. C.
Pollocksville, N. C.
Durham, N. C.
Durham, N. C.
Raleigh, N. C.
White Plains, N. C.
Bunnlevel, N. C.
Dothan, Alabama

Burch, Donald Harden
Campbell, Marshall Albright
Carlton, Elizabeth
*Carpenter, Edna Widenhouse
Caudle, James N.
Cheek, Vernon Roy
Cline, Mack Ivey
Clutz, Garland William
Colvard, Frances Virginia
*Conley, Mabel Claire
Connally, Julian Underwood
Copeland, Bessie Olivia
Cotton, Albert Henry
Councilor, Harry Alan
Cousins, Reba Thurston
Cox, Phoebie Louisa
Currin, Frances Lelia
Davis, Mrs. Harvey Landis
Dean, Dayton Robert
Dowd, Rozzelle Edward
Downing, Lena Brooks
Dry, Verne Ritchie
Dunn, Osborne Eugene
Dunn, William Lamar, Jr.
Edwards, Montgomery Roger
Elias, Edna Kilgo
Eure, Hilliard Manley, Jr.
Evans, James Fred
*Exum, Jamie Herring
Farmer, William Dempsey
Farriss, Carter Wood
Felmet, Lucian Holt
Fortescue, William Nicholas
Foushee, Frances Leake
Fowler, Horace Ware
Frick, Harvey Lee
Fussell, Elizabeth
Garrard, Hubert Lee
*Gibbons, John Partridge
Gibson, Martha
Godfrey, O. C.
Goode, Hal Kelly
Grimes, Hal Alma
Groce, William Harold
Groome, Wilbur
Gunnin, Carroll Edgar
*Haddock, Lucille Bell
Hales, John Donivon, Jr.
*Hampton, Patsy Catherine

Durham, N. C.
Greensboro, N. C.
Durham, N. C.
Cedar Falls, N. C.
Greensboro, N. C.
Durham, N. C.
Gold Hill, N. C.
Baltimore, Maryland
North Wilkesboro, N. C.
Lenoir, N. C.
Leasburg, N. C.
Windsor, N. C.
Durham, N. C.
Washington, D. C.
Durham, N. C.
Winston-Salem, N. C.
Durham, N. C.
Durham, N. C.
Mount Airy, N. C.
Dunn, N. C.
Durham, N. C.
Richfield, N. C.
Clinton, N. C.
Pinetops, N. C.
Rutherfordton, N. C.
Charlotte, N. C.
Lenoir, N. C.
Greer, S. C.
Snow Hill, N. C.
Bailey, N. C.
High Point, N. C.
Asheville, N. C.
Scranton, N. C.
Durham, N. C.
Monroe, N. C.
Gold Hill, N. C.
Stedman, N. C.
Durham, N. C.
Hamlet, N. C.
Laurinburg, N. C.
Spencer, N. C.
Rutherfordton Col., N. C.
Lexington, N. C.
Salisbury, N. C.
Greensboro, N. C.
Gastonia, N. C.
Durham, N. C.
Pikeville, N. C.
Durham, N. C.

Hampton, William Beans
Hancock, Evelyn Margaret
Hanes, John Chisman
Harbison, Annie Christal
Harris, James Wesley
Harrison, Evelyn Jennings
Hathaway, Offie Lemuel
*Hatley, Raymond Caldwell
Hauss, William Cecil
Haynes, Sheldon Elias
Hepler, Joseph Madison
Herring, Marvin Joe
Hill, Thomas Spencer
Hix, Mary Elizabeth
Hobgood, Virginia Lucille
Holt, Gladys
*Holt, Isaac Terry
Hooker, Charles Wright
Horton, Daniel Webster
*Hostettler, Lynn Williamson
Howie, Henry Gilmer
Howland, William Franklin, Jr.
Huffman, Norman Ara
Hughes, Arthur Jefferson, Jr.
*Hughes, Mary Sue
*Hull, Oscar Coleman
Huneycutt, Frances Ruth
Jennette, Dorothy Walland
Jennings, William Henry
*Johnson, Delacy Thomas
Johnson, Hazel
Johnson, John Walter
Judd, Violette Catherine
Keever, Nancy Catherine
*Kent, Alfred Abram, Jr.
King, George Benjamin, Jr.
Kistler, Henry Evans
Kramer, Joseph Perry
Lake, Charles Elmer, Jr.
Lanier, Walter Lee
Lassiter, William Carroll
Lavinder, Peggy
Laws, Rose
Leach, John S.
LeGette, Melva Iris
Leggett, Julia
Lemons, Ervin A.
Lewis, William Urban
Lewis, William Whitfield

Durham, N. C.
Wilmington, N. C.
Pine Hall, N. C.
Glen Alpine, N. C.
Durham, N. C.
Williamston, N. C.
Middlesex, N. C.
Oakboro, N. C.
Lincolnton, N. C.
W. Sulphur Sp'gs., W. Va.

Kernersville, N. C.
Mount Olive, N. C.
Newport, N. C.
Durham, N. C.
Durham, N. C.
Durham, N. C.
Duke, N. C.
Durham, N. C.
Durham, N. C.
Barium Springs, N. C.
Charlotte, N. C.
Henderson, N. C.
Asheville, N. C.
Fountain Inn, S. C.
Durham, N. C.
Roxboro, N. C.
Denver, N. C.
Norlina, N. C.
Rocky Mount, N. C.
Thomasville, N. C.
Ingold, N. C.
Greenville, S. C.
Varina, N. C.
Lewisville, N. C.
Lenoir, N. C.
South Boston, Va.
Charlotte, N. C.
Elizabeth City, N. C.
Mount Vernon, Ohio
Norwood, N. C.
Smithfield, N. C.
Abingdon, Va.
Moravian Falls, N. C.
Washington, N. C.
Latta, S. C.
Durham, N. C.
Reidsville, N. C.
Durham, N. C.
Edenton, N. C.

Lippard, Homer Luther
Long, John Henry
Long, Fortense Duncan
Lucas, John Paul
Luquire, Claude Rufus
MacFadyen, Elizabeth Ann
*Matthews, Joseph James
McCaslin, Blackard
McCracken, Frank Webb, Jr.
McCracken, Maude
McCurdy, Harold Grier
McDonald, Florence Isobel
McGary, Nelson George
McKay, Patsy Goldstone
Markham, Katherine
Martin, Bessie Mary
Martin, Ruth Elizabeth
Mason, Frances Letitia
Mattox, Alvah Stone
Mattox, William Reuben
Max, Charles
Miller, Hugh Hampton
Miller, Mabel Watson
Mintz, Maxwell A.
Mitchell, Ernest E.
Montgomery, Elizabeth
Moore, Margaret Meldonia
Moore, Vertie Norfleet
Morgan, Katherine
Morris, Esther Jane
Murray, Webb Alton
Needham, Eugene Warren
O'Keef, Herbert Edward, Jr.
Peeler, Melvin Ambrose
Peoples, Marjorie Dee
Perkins, Raymond Keller
*Phillips, Katherine
Pickett, William Clifton, Jr.
*Pierce, William Alexander, Jr.
Pitts, Ralph
Plyler, Epie Duncan
Plyler, Marion Timothy, Jr.
Pool, Bob Lem
Pool, Edith Irene Dement
*Porter, Charles Walter
Presson, Irene
Price, Paul
*Ragan, Doris Lee
Rawlings, Selby Moore

Barium Springs, N. C.
Unionville, N. C.
Durham, N. C.
Charlotte, N. C.
Durham, N. C.
Concord, N. C.
Milton, Ky.
La Grange, Tenn.
Sanford, N. C.
Durham, N. C.
Salisbury, N. C.
Lillington, N. C.
Durham, N. C.
Durham, N. C.
Durham, N. C.
Beaumont, Texas
Richmond, Va.
Durham, N. C.
Glade Hill, Va.
Pen Hook, Va.
Newark, N. J.
Winston-Salem, N. C.
Wytheville, Va.
New York, N. Y.
Willard, N. C.
Wilmington, N. C.
Forest City, N. C.
Roxboro, N. C.
Hillsboro, N. C.
Raleigh, N. C.
Maiden, N. C.
Pfafftown, N. C.
Wilmington, N. C.
Washington, N. C.
Blue Ridge, N. C.
Springfield, Mass.
Durham, N. C.
Lexington, N. C.
Weldon, N. C.
Glen Alpine, N. C.
Durham, N. C.
Durham, N. C.
Lindale, Texas
Lindale, Texas
Asheville, N. C.
Monroe, N. C.
Marietta, N. C.
Durham, N. C.
North Emporia, Va.
*Reade, Helen
Reams, James Monroe, Jr.
Reynolds, Rufus Wiley
Robbins, Paul Nelson
Roberts, Frank C.
Robertson, Emma Laura
Robertson, Samuel Berry
Rodwell, Mary Frances
Rousseau, William H.
Rowe, James Burnett
Royster, Mary Elizabeth
*Ruark, Henry Gibbons
Rubinstein, Nathan
Ruddick, Ronald Clarence
Sadler, Alton Guy
Safrit, Robert W.
Savage, Joe
*Seagroves, Lucy Ann
Separk, Joseph Gray
Shankle, Herbert Lazelle
Shaw, John Sidney
Shinn, Fred Harris
Shull, Horatio Sherard
Simpson, Ola Virginia
Sloan, Virginia Westbrook
Smith, Charles Moody
Smith, Kathleen O.
*Smith, Margaret Edith
Smith, Mary Alyse
*Smith, Paul Wesley
Snidow, James Flynn
Spence, Mary Elizabeth
Spivey, Nelle
Stalvey, James Benjamin
Stanley, James Savage, Jr.
Stearns, Richard Hopkins
Stearns, Thomas Suddard
Strickland, Gladys
Suther, Irene
Swaringen, Johnson Harold
Thompson, Lucie Elizabeth
Thorne, Robert Patterson
Thorpe, David Hudnutt
Thrift, Charles Tinsley, Jr.
Tilley, Mary Pauline
Tsuda, Minoru
*Tyson, Thomas David
*Umberger, Anita
Umstead, Annie Piper

Durham, N. C.
Kingsport, Tenn.
Leaman, N. C.
Siler City, N. C.
Buffalo, N. Y.
Woodsdale, N. C.
Greenville, S. C.
Warrenton, N. C.
Orangeburg, S. C.
Charlotte, N. C.
Bessemer City, N. C.
Raleigh, N. C.
New York, N. Y.
Ardmore, Pa.
Rocky Mount, N. C.
Mount Gilead, N. C.
Rocky Mount, N. C.
Durham, N. C.
Gastonia, N. C.
Mount Gilead, N. C.
Orlando, Fla.
Concord, N. C.
Easton, Pa.
Durham, N. C.
Wallace, N. C.
Charlotte, N. C.
Concord, N. C.
Charlotte, N. C.
Burlington, N. C.
Charlotte, N. C.
Princeton, W. Va.
Goldsboro, N. C.
Hertford, N. C.
Tabor, N. C.
Asheville, N. C.
Maywood, Ill.
Maywood, Ill.
Durham, N. C.
Concord, N. C.
Cornelius, N. C.
Creedmoor, N. C.
Littleton, N. C.
Haverford, Pa.
Moyock, N. C.
Durham, N. C.
Hawaii
Mebane, N. C.
Concord, N. C.
Durham, N. C.

Underwood, Verna Mary
*Upchurch, Inez Page
Vale, Charles E.
Varner, Robert Milton
Vaughn, Leo Bernard, Jr.
Vaughan, William T.
Ward, Thomas William
Washam, Conrad Cline
Weatherspoon, Everett Broadus
Webster, James Harden
Weingarten, Harold Charles
Werber, William Murray
*White, William Alexander
Widenhouse, Arthur Lee
Williams, Calvin U.
*Williams, James Wesley
Wingate, William James, Jr.
*Womble, Susan
Wright, Esther Sayre
Wyche, Alma Virginia
Yamanishi, Kimiko
Yandle, Ray A.

Mount Holly, N. C.
Durham, N. C.
Hillsboro, N. C.
Concord, N. C.
Boone, N. C.
Virgilina, N. ©.
Coleridge, N. C.
Davidson, N. C.
Durham, N. C.
Stokesdale, N. C.
Brooklyn, N. Y.
Berwyn, Md.
Paterson, N. J.
Concord, N. C.
Jackson, N. C.
Charlotte, N. C.
Lincolnton, N. C.
Raleigh, N. C.
Durham, N. C.
Weldon, N. C.
Japan
Indian Trail, N. C.

\section*{JUNIOR CLASS}

Alexander, William Edgar
Alexander, Willie Pearl
Almond, John Willis
Anders, Fred William
Anderson, Ernest Coleman
Andrews, Henry Lucian
Armfield, Joseph H., Jr.
Arnold, Wayne Sylvester
Barden, Walter James, Jr.
Barnhardt, Zeb Glenn
Barnette, Henry Vance
Bartlette, Verne Edwin
Battle, Margaret
Belue, Jean Sheldon
Bisson, Richard J.
Boddie, Margaret Webb
Bone, Theron Arthur
Booth, Roy Murphy
Bowman, Clarice Margaret
Bradsher, Mary Elizabeth
Bretholl, Carl Frederic
Brian, Earl Wintrey

Durham, N. C.
Vass, N. C.
Albemarle, N. C.
Gastonia, N. C.
Lenoir, N. C.
Mount Gilead, N. C.
Greensboro, N. C.
Greensboro, N. C.
Durham, N. C.
Oakboro, N. C.
Roxboro, N. C.
Weaverville, N. C.
Raleigh, N. C.
Blacksburg, S. C.
Springfield, Mass.
Durham, N. C.
Rocky Mount, N. C.
Pollocksville, N. C.
Mount Airy, N. C.
Petersburg, Va.
Pores Knob, N. C.
Asheville, N. C.

\footnotetext{
* Completed the requirements for graduation in summer school.
}

Bridgers, Frank Ernst, Jr.
Brinkley, Francis Henderson
Brown, Charlie Glenm
Brown, Mary Geneva
Bruton, Arthur B.
Bryant, George Raney
Buie, Samuel Marvin, Jr.
Burch, George Coleman
Burch, Vella Jane
Burchette, Lucy Dobbins
Cain, Gladys Idelle
Caldwell, Elizabeth Miller
Carpenter, Adolphus Wesley
Carpenter, Donald S.
Carpenter, Elsie Lee
Carter, Margaret Louise
Caviness, Radcliffe Lewis
Clark, Sara Elizabeth
Clippard, J. Dwight
Coble, James
Cochrane, Robert Bingham
Colclough, Madge Hazel
Cole, Lee W.
Coleman, Margaret Louise
Cottrell, Joseph
Cozart, Jaxie
Crews, Charlotte Edwina
Crouch, C. Conrad
Crute, John Manson Webb
Cunningham, Bertha
Dailey, Florence Roney
Dailey, John C.
Daniel, Mary Elizabeth
Deiso, Alfred J.
Dickerson, Robert Turpin
Dominick, Hal M.
Downing, John C.
Eatmon, Ida Pearl
Ehringhaus, Erskine Edgerton
Elmer, Charles Robert
Emerson, Charles Edward, Jr.
English, Hettie
Ewing, Emma Louise
Fair, Charles Lamar
Farabee, Lawrence Burt
Farley, Roland
Farr, David Thomas
Faucette, Mary Elizabeth
Fecheimer, Grace

Laurel, Miss.
Portsmouth, Va.
Potecasi, N. C.
Raleigh, N. C.
Concord, N. C.
Richmond, Va.
Winston-Salem, N. C.
Roxboro, N. C.
Durham, N. C.
Winston-Salem, N. C.
Durham, N. C.
Monroe, N. C.
Durham, N. C.
Maiden, N. C.
Durham, N. C.
Asheville, N. C.
Portsmouth, Va.
Washington, N. C.
Belwood, N. C.
Durham. N. C.
Asheville, N. C.
Durham, N. C.
Hamlet, N. C.
Durham, N. C.
Richmond, Va.
Durham, N. C.
Dabney, N. C.
Hickory, N. C.
Wilson, N. C.
Bryson City, N. C.
Mebane, N. C.
Durham, N. C.
Oxford, N. C.
Mount Vernon, N. Y.
Richmond, Va.
Cordele, Ga.
Durham, N. C.
Bailey, N. C.
Hendersonville, N. C.
Ironton, Ohio
Revin, Mass.
Mount Olive, N. C.
Conway, N. C.
Harrisburg, Pa.
Lexington, N. C.
Danville, Va.
Clinton, S. C.
Durham, N. C.
South Norwalk Conn.

Flinton, Blair M.
Fonville, Ralph William
Frank, Grady Craven
Gamble, Allen Owen
Garland, Daniel Martin
Gee, Willie Augusta
George, Alex
Gilfillan, Robert George, Jr.
Gilliam, Curtis Bernard
Graves, George Marvin
Graves, William W.
Grimes, Byron C.
Grimsley, Edward Lee
Handelsman, Bertram
Hanks, James Monroe
Harmon, John Colvin
Hawkins, Spencer Lee
Heizer, James Sidney
Higgins, Gladys Merle
Hill, Frances Faison
Hocutt, Edgar Jerome
Holleman, Matilda
Hollingsworth, Harry
Holsomback, Ben G.
Holt, Douglas Leigh
Holtz, Harry Myers
Honeycutt, Alden Proffitt
Honeycutt, Charles Fletcher, Jr.
Hoopy, George Clayton
Hottenstein, Henry Franklin
Howard, Mary Anna
Howard, Richard Onslow
Howell, Lillian Wyche
Hughes, James Aubrey
Hunter, Roy Alexander
Huth, Harry Alan
Jankoski, John Edward
Jenkins, Ernest L.
Jenkins, Helen
Johnson, Emma Bain
Johnson, Glenn Ware
Johnson, Irma Cornelia
Jones, Morris A.
Jordan, Thomas Ear1
Joyce, John Leroy
Joyner, William E.
Kanipe, Hubert Lee
Kehlman, William H.
Ketchin, Henry Elliott

Raleigh, N. C.
Mebane, N. C.
Japan
Birmingham, Ala.
Harrisburg, Pa.
Henderson, N. C.
Shelby, N. C.
Swarthmore, Pa.
Milwaukee, N. C.
Nettleton, Ark.
Wilson, N. C.
Hagerstown, Md.
Kernersville, N. C.
New York City
Anderson, S. C.
Council, N. C.
Paw Creek, N. C.
Silver Springs, Md.
Asheville, N. C.
Durham, N. C.
Enfield, N. C.
Durham, N. C.
Newton, N. C.
Raleigh, N. C.
Franklin, Va.
Newark, N. J.
Burnsville, N. C.
Suffolk, Va.
Lemoyne, Pa.
Millersburg, Pa .
Tarboro, N. C.
Swan Quarter, N. C.
Goldsboro, N. C.
Schoolfield, Va.
Charlotte, N. C.
Haddenfield, N. J.
Milwaukee, Wis.
Lincolnton, N. C.
Clayton, N. C.
Winston-Salem, N. C.
Vale, N. C.
New Hill, N. C.
Rome, Ga.
Tyner, N. C.
Broadway, N. C.
Louisburg, N. C.
Old Fort, N. C.
New York, N. Y.
Winnsboro, S. C.

King, Ruth
Kirkland, Jack L.
Kirkland, Margaret Camille
Kirkland, Mary Rebecca
Kirkpatrick, Alton Kermit
Knowles, Elton T.
Kramer, John Andrew
Krupp, Frederick William
Lambert, Eloise
Landis, Margaret Vernon
Lasher, James Lewis
Latham, Hannis Taylor
Lehrbach, Charles William
Leonard, John Cleveland, Jr.
Ligon, James Harris
Liles, Charles Clinton
Livengood, Charles H., Jr.
Loy, Milton
Lupton, Harvey Arthur
Lynch, Mabel Mildred
Lynn, Waylon Everett
McAnally, Nancy
McDonald, Flemmon Pernell
McDougall, Kenneth Dougal
McFarland, Thelma
McIntyre, John D.
McKenzie, Duncan Archibald
McKinney, Troy Vaughn
McLarty, Emmett Kennedy
McLaughlin, Donald Clay
Malone, Virginia
Mann, Glen Edward
Marino, Peter Matthew
Marr, Leta Mae
Marshall, Whitfield Huff
Martin, Frank Jack
Martin, William Southgate
Massengill, George Kemp
Massengill, Paul Robinson
Matthews, Elizabeth Kelly
May, Francis Joseph
Mayo, Robert Joseph
Menaker, Frank Howitz
Merritt, Gertrude Elizabeth
Metz, Clarence William
Millican, James Leroy
Mims, Virginia Harris
Mobley, Howard Reid
Mock, Kathleen

Whitakers, N. C.
Durham, N. C.
Durham, N. C.
Durham, N. C.
Swepsonville, N. C.
Pasadena, Cal.
Elizabeth City, N. C.
Philadelphia, Pa.
Ironton, Ohio
Durham, N. C.
Danbury, Conn.
Washington, N. C.
Mount Vernon, N. Y.
Bristol, Tenn.
Shelby, N. C.
Littleton, N. C.
Durham, N. C.
Shelby, N. C.
Cedar Grove, N. C.
Mebane, N. C.
Morrisville, N. C.
Richmond, Va.
Lillington, N . C.
Durham, N. C.
Durham, N. C.
Bristol, Tenn.
Windsor, N. C.
Shelby, N. C.
High Point, N. C.
Hagerstown, Md.
Cleveland, Tenn.
West Helena, Ark.
Jamaica, N. Y.
Winston-Salem, N. C.
Washington, D. C.
Durham, N. C.
Henderson, N. C.
Raleigh, N. C.
Raleigh, N. C.
Durham, N. C.
Paterson, N. J.
Bethel, N. C.
Harrisburg, Pa.
Burgaw, N. C.
Columbiana, Ohio
West Huntsville, Ala.
Reidsville, N. C.
Reidsville, \(\mathrm{N}_{\mathrm{L}} \mathrm{C}\).
Lexington, N. C.

Moorman, Mary
Morgan, Horace P.
Morgan, John Irvin, Jr.
Morgan, Sam Thomas
Moses, Anna Katherine
Moss, Clyde Eugene
Mulholland, Elizabeth Faye
Mullen, William Luther
Murphy, Charles Springs
Murray, Russell Vernon
Murray, William David
Murrell, Mildred Jane
Myers, Calla
Needham, Antoinette
Nesson, Henry Ward
Noel, Richard D.
Noland, Hugh Love
Northcutt, Charles Nelson
Oliver, James Ernest
Osborne, Thomas Frank
Ould, Carlton Lee
Overstreet, Daniel Smith
Owen, William Kendrick
Parrott, Jacob Allen
Parsons, Walter Clarence
Pearce, Inez Moore
Pearson, William Glenn
Peatfield, Norman E.
Peek, Eleanor Hope
Perkins, Mrs. Lila Roane
Pitt, Iva Knight
Poe, Vonnie Alberta
Powell, Fannie Burwell
Powell, Margaret Lee
Pratt, Francis Marion
Pratt, Joseph Gaither
Price, Henry
Price, John Alton
Proctor, Gipsie Elvina
Purdy, Mary H.
Randle, Clint Wilson
Rankin, Cecil Coke
Ranson, Lloyd Russell
Rawls, William Eugene
Ray, George William
Reams, Robert Lawson
Reddish, Paul Sigmon
Redford, May Bess
Rich, Charles Hampton

Bristol, Va.
Vienna, Ga.
Farmville, N. C.
Mebane, N. C.
Durham, N. C.
Richmond, Va.
Durham, N. C.
Dothan, Ala.
Wallace, N. C.
Oxford, N. C.
Brooklyn, N. Y.
Henderson, N. C.
Pineville, N. C.
Pfafftown, N. C.
Durham, N. C.
Athens, Tenn.
Waynesville, N. C.
McFarlan, N. C.
Marietta, N. C.
Loray, N. C.
Roanoke, Va.
Wakulla, N. C.
Conway, S. C.
Kinston, N. C.
Ellerbe, N. C.
Richmond, Va.
Gastonia, N. C.
South Hamilton, Mass.
Durham, N. C.
Memphis, Tenn.
Roanoke Rapids, N. C.
Durham, N. C.
Henderson, N. C.
Savage, N. C.
Winston-Salem, N. C.
Winston-Salem, N. C.
Monroe, N. C.
Rocky Mount, N. C.
Durham, N. C.
Oriental, N. C.
Hickman, Ky.
Wilmington, N. C.
Charlotte, N. C.
Suffolk, Va.
Raleigh, N. C.
Kingsport, Tenn.
Durham, N. C.
Durham, N. C.
Winston-Salem, N. C.

Roberts, Thomas Lynwood
Robeson, Stuart Hogan
Rogers, George Howard
Rogers, Margaret Turrentine
Rollins, Thomas Gaston, Jr.
Root, Mrs. Carolyn
Rosen, Charles Daniel
Rosky, Marcus
Rowe, Frances Eleanor
Rupp, Charles Edwin
Russell, Robert Moore
Rutenburg, John Martin
Satterfield, Carlotta Gilmore
Sechriest, Vernon
Self, Roy H.
Sellers, William Porter
Sharpe, Ann Courtney
Sherard, Henry Morvin, Jr.
Silver, Kermit Earl
Simkin, Edward
Singletary, Mildred
Smith, Eunice
Smith, James Gordon
Smith, Ralph Cannon
Smith, Walton Wright
Spear, Charles Edward Stanbury, Walter Albert, Jr. Starnes, Ralph Odell Stephenson, Bennette Edward Stephenson, Marion Osborne Stewart, Daniel Niven, Jr. Sturge, Philip Haven Taggart, John C. Tannenbaum, Abraham Jack
Taylor, Andrew DuVal
Taylor, Frederick William
Taylor, Thomas Glenn
Teague, Hillery Burton
Terrell, Marie
Thomas, Ralph Edward
Thompson, James Beverly
Tobias, Manuel S.
Umstead, Hampton Bernice
Underwood, Samuel Bobbitt, Jr.
Upchurch, Walter McGowan, Jr.
Veitch, Charles Edgar
Wade, Louis Mann
Walker, Herman, Jr.

Durham, N. C.
Durham, N. C.
Asheville, N. C.
Durham, N. C.
Durham, N. C.
Durham, N. C.
New York, N. Y.
Chicago, Ill.
Memphis, Tenn.
Hagerstown, Md.
Durham, N. C.
New York, N. Y.
Durham, N. C.
Thomasville, N. C.
Shelby, N. C.
Norfolk, Va.
Lumberton, N. C.
Goldsboro, N. C.
Canton, N. C.
Clifton, N. J.
Clarkton, N. C.
Pantego, N. C.
Leakesville, N. C.
Ayden, N. C.
Wilson, N. C.
Kinston, N. C.
Durham, N. C.
Asheville, N. C.
Plymouth, N. C.
Rocky Mount, N. C.
Raleigh, N. C.
Scranton, Pa.
Durham, N. C.
Paterson, N. J.
Charlotte, N. C.
New York, N. Y.
Peachland, N. C.
Weaverville, N. C.
Durham, N. C.
Thornton, W. Va.
Mount Hope, W. Va.
Agnascalientes, Aga.
Mexico
West Durham, N. C.
Greenville, N. C.
Raleigh, N. C.
Winston-Salem, N. C.
Raleigh, N. C.
Bradenton, Fla.

Walker, Mary Lipscombe
Wall, Lindsay S.
Walston, Fred I.
Walters, Alex H.
Wannamaker, Isabel
Warren, Allen Linwood
Watkins, Maxine Elliott
Watson, Nellie Margaret
Whitener, Helen Mae
Wilkerson, Mary Josephine
Wilkins, Elizabeth Mae
Wilkins, Ethel Gertrude
Williams, Elizabeth Baxter
Williams, Erma Elizabeth
Williams, Henri Fuzelle
Williams, John Roger
Williams, Robert
Williams, Staton Pender
Williamson, Elsie Louise
Wilson, Nellie Gray
Winkler, Joseph Garland
Wood, Ivey Walton
Woodward, Lila Mack
Wynn, Mary
Yarbrough, Cornelia Elliot
Zachary, Henry

Durham, N. C.
Winston-Salem, N. C.
Conetoe, N. C.
La Grange, N. C.
Durham, N. C.
Durham, N. C.
Durham, N. C.
Durham, N. C.
Huntersville, N. C.
Raleigh, N. C.
Durham, N. C.
Bahama, N. C.
Charlotte, N. C.
Kenansville, N. C.
Wilmington, N. C.
Norristown, Pa.
Elizabeth City, N. C. Robersonville, N. C.
Durham, N. C.
Oxford, N. C.
Granite Falls, N. C.
Troy, N. C.
Richlands, N. C.
Jonesville, Va.
Durham, N. C.
Cooleemee, N. C.

\section*{SOPHOMORE CLASS}

Acheson, John Bain Adams, Wade Hill, Jr. Adkins, Edward Emery Aiken, Jesse E. Akers, Lois Pridgen Aldridge, Daniel Thomas
Alford, Dallas
Allan, James George
Allen, Charles Bonner
Allen, Frank Brown
Alley, Robert Cline
Altvater, Mrs. Margaret G.
Anders, Helen Kathleen
Anderson, John Bascom
Anderson, Richard F.
Anderson, Wade Hampton
Andrews, Cleveland D.
Andrews, Homer Burns
Armstrong, John Franklin
Atkins, Ennis W.
Atkins, Robert Boyer

Evanston, Ill.
Richmond, Va.
Durham, N. C.
Wilson, N. C.
Roanoke Rapids, N. C.
Union Ridge, N. C.
Durham, N. C.
Charlottesville, Va.
Wadesboro, N. C.
Warrenton, N. C.
Waynesville, N. C.
Denver, Colo.
Gastonia, N. C.
Asheville, N. C.
Albemarle, N. C.
Wilson, N. C.
Gastonia, N. C.
Mount Gilead, N. C.
Asheville, N. C.
Gastonia, N. C.
Washington, D. C.

Atwater, Luther Edmund, Jr.
Baker, Rudolph Jackson
Baldwin, Mary Grace
Ballard, Philip A.
Banes, Thomas Stanley
Barbee, Arthur Odell
Barbee, Mary Elizabeth
Barber, Marjorie
Barber, Ruth Kerns
Baroody, B. J.
Barrington, Carl Adams
Bateman, James Anson
Beaver, Robert Lee
Bell, Bennie
Belvin, Herman Edward
Bennett, Thomas Warner
Benson, Walter Clark
Best, Flora Crews
Betts, Lonnie J.
Bicket, Andrew Brown
Blackley, O. Purnell
Blackmon, Oliver C., Jr.
Boggs, Roy Dixon
Bolich, Eugene D.
Bolich, Philip M.
Boone, Demetrius Leonard, Jr.
Bowden, Robert Threadgill
Boyd, Edna McLean
Branson, Mary Lou
Bretts, Philip Shrager
Brewer, Pierce Oliver
Bridgers, Julian D.
Brogden, Genola Lloyd
Brooks, Ernest Bruce
Brooks, William Eugene
Broom, Willie Madison
Brown, Edward
Brown, Holwin Tilden
Brown, Richard Lane, Jr.
Bryan, Belton O'Neal
Budd, W. Candler
Buirge, Raymond Enright
Bulla, Eugene A.
Bundy, William Lundsden
Bundy, William Thomas
Burch, Betty
Burt, Howard Hodgins
Byers, Joseph Riley
Campbell, Eugene Bernard

Burlington, N. C.
Holly Springs, N. C.
Swannanoa, N. C.
Reidsville, N. C.
Fort Pierce, Fla.
Durham, N. C.
Durham, N. C.
Durham, N. C.
Bellwood, Pa.
Timmonsville, S. C.
Oriental, N. C.
Roper, N. C.
Spencer, N. C.
Farmville, N. C.
Durham, N. C.
Cleveland, O .
Gatesville, N. C.
Fremont, N. C.
Fuquay Springs, N. C.
Brooklyn, N. Y.
Hamlet, N. C.
Lancaster, S. C.
Statesville, N. C.
Denver, N. C.
Winston-Salem, N. C.
Durham, N. C.
Richmond, Va.
Washington, N. C.
Durham, N. C.
Philadelphia, Pa.
Winston-Salem, N. C.
Conway, N. C.
West Durham, N. C.
Durham, N. C.
Reidsville, N. C.
North Charlotte, N. C.
Chelsea, Mass.
Troutman, N. C.
Albemarle, N. C.
Duncan, S. C.
Dothan, Ala.
Mason City, Ia.
Randleman, N. C.
Smithfield, N. C.
Charlotte, N. C.
Charlotte, N. C.
Saint Maries, Idaho
Hendersonville, N. C.
Lynchburg, Va.

Cannon, Albert Henry
Carlos, Thomas
Carpenter, T. Edgar
Carter, Raymond C.
Carter, W. C.
Carver, William Malone
Chang, Tsong Chien
Cheek, Aubrey K.
Clapp, George Willard
Clark, Milton S.
Clarke, Elizabeth Ray
Clodfelter, Edward Parrish
Cobb, Edgar D.
Cobb, Edward Rawls
Cobb, John Wilson
Coble, Edgar Moody
Cole, James Marvin
Coleman, Daniel L.
Collier, Raymond B.
Compton, James Allen
Cook, Ralph H.
Cottingham, John Colin
Coulter, Leland H.
Cousins, Mattie Gray
Courtney, Robert Marvin
Covner, David Philip
Craft, Norma Louise
Craven, Mary Elizabeth
Creekmore, R. Tazewell
Crim, Joanna
Crona, Gerald M.
Croson, Joseph McGuire
Crowson, Neblett Ferguson
Curtis, Zeb F.
Daniels, Hayden Eugene
Davenport, David Laxton
Davenport, William Fred
Davis, Elizabeth Eleanor
Davis, Vivian
Day, William Allen
DeBruyne, A. L.
DeBruyne, Leonora
Diamond, Theresa
Disher, Leo Seewers, Jr.
Dixon, James Alvin
Dixon, Harold Keith
Dorfman, William A.
Dorsey, Thomas Buic
Douty, Harry M.

Spruce Pine, N. C.
New Bethlehem, Pa.
Durham, N. C.
Durham, N. C.
Mount Hope, W. Va.
Rougemont, N. C.
Shanghai, China
Durham, N. C.
Burlington, N. C.
Goldsboro, N. C.
Wilmington, N. C.
High Point, N. C.
Hickory Grove, S. C.
Durham, N. C.
Durham, N. C.
Durham, N. C.
Durham, N. C.
Dayton, Pa.
Garysburg, N. C.
Mebane, N. C.
Greensboro, N. C.
Dillon, S. C.
Vandergrift, Pa .
Durham, N. C.
Morganton, N. C.
Lynn, Mass.
Wilmington, N. C.
Lakeland, Fla.
Norfolk, Va.
Winston-Salem, N. C.
Portland, Maine
Washington, D. C.
Burlington, N. C.
Asheville, N. C.
Elizabeth City, N. C.
Horse Shoe, N. C.
Greenville, N. C.
Philadelphia, Pa.
Oxford, N. C.
Bradentown, Fla.
Durham, N. C.
Durham, N. C.
Danville, Va.
Winston-Salem, N. C.
Cheriton, Va.
Kinston, N. C.
Hoboken, N. J.
Goldsboro, N. C.
Baltimore, Md.

Downum, Allen Fitzgerald
Drew, William P.
Duffey, Horace Rodney
Earnhardt, Davis Furman
Eatmon, William Godfrey
Edgerton, Henry D.
Edwards, Howard M.
Elders, Hubert Thomas
Eley, William Hatcher, Jr.
Elmore, Irvin Hall
Embree, Ralph
Everham, Earle B.
Farmer, Allison Barnes
Farthing, William Patrick
Felts, Virginia Lee
Fergus, LeRoy Clark
Finch, Alvis Dare
Finch, Edwin Perkins
Fisher, Bernard
Fisher, Thomas Clapp
Fleming, Douglas Lloyd
Flood, Harold Dinsmore
Fox, J. B., Jr.
Francis, Pauline S.
Franklin, Hubert
Freeman, William Chester
Frick, Fred G.
Friedman, Bernard
Fuller, Sumner Bacon
Fulp, James Francis
Fulp, William W.
Fuquay, Oscar
Gamble, John Jenkins
Gannon, George Patrick
Garber, Don Martin
Garmon. Charles H.
Garner, Samuel Paul
Garrison, William J., Jr.
Gentry, H. Bradsher
Gentry, Roger S.
Gibson, Harold Morgan
Glenn, Argyle
Gobbel, James Thomas
Gordon, Mabel Page
Gordon, William R.
Gould, Frederic Theodore
Grant, James William
Gray, Larry Lee
Gray, Mary Stuart Bingham

Gloucester, N. C.
Asheville, N. C.
Washington, D. C.
Port Orange, Fla.
Rocky Mount, N. C.
Kenly, N. C.
Mullins, S. C.
Columbia, S. C.
Suffolk, Va.
Lowell, N. C.
Buena Vista, Va.
Neptune, N. J.
Bailey, N. C.
Durham, N. C.
Durham, N. C.
Wilmington, N. C.
Bailey, N. C.
Henderson. N. C.
Atlantic City, N. J.
Salisbury, N. C.
Ardmore, Pa.
Swarthmore, Pa.
Henderson, N. C.
Bryson City, N. C.
Rutherford, N. J.
Silver Springs, Md.
Gold Hill, N. C.
New York, N. Y.
Durham, N. C.
Kernersville, N. C.
Kernersville, N. C.
Lillington, N. C.
Birmingham, Ala.
Pittsburgh, Pa.
Washington, D. C.
Charlotte, N. C.
Winston-Salem, N. C.
Crozet, Va.
Roxboro, N. C.
Roxboro, N. C.
Laurinburg, N. C.
Richmond, Va.
Salisbury, N. C.
Elizabeth City, N. C.
Elizabeth City, N. C.
Lake George, N. Y.
Durham, N. C.
Wadesboro, N. C.
Mebane, N. C.

Gray, William Frederic
Grayson, George W.
Green, A. Hobart
Green, Martin Klapp
Green, Ottis, Jr.
Griffin, Lewter Bernice
Griffith, Lloyd Edward
Griggs, Morton M.
Groome, Houston
Gurley, John Leland
Guthrie, Mildred M.
Hadley, Jake Milton
Hamilton, William Secrest
Hamm, Edward F., Jr.
Hardin, George Coble
Harrell, George T., Jr.
Harrell, Margaret Gertrude
Harriett, George Willie
Harrington, Milton E.
Harris, Henry Spencer
Harris, Major Haymond
Harris, Marcus Dean
Harris, Newton Hines
Harris, Thomas B.
Harrison, Annie Irene
Harrison, Elmer C.
Harrison, James Keith
Harwell, George Corbin
Hawkins, Samuel Jackson
Hayes, John Calhoun, Jr.
Hayes, Robert Griffith, Jr.
Hege, John D.
Heise, Edward Alex
Hellman, Jacob
Helms, Grady Thomas
Henry, Carolyn
Henry, Fannie Charles
Henry, Thomas Allison
Hermelink, Gretel
Herbert, Charles
Hicks, William B.
Hiltabidle, James Grayson
Hinternhoff, Charles Frank
Hintze, William Niestill
Hobbs. Marcus E.
Hobgood, Blanche Parham
Hobgood, Evaleigh
Hoffman, Byron Jay
Hooper, Conrad Sidney, Jr.
Howard, Fletcher E.

Durham, N. C.
Spindale, N. C.
Mooresboro, N. C.
Raleigh, N. C.
Asheville, N. C.
Potecasi, N. C.
Rockingham, N. C.
Mayodan, N. C.
Greensboro, N. C.
Princeton, N. C.
Swan Quarter, N. C.
Greenville, N. C.
Monroe, N. C.
Kenilworth, Ill.
Greensboro, N. C.
Asheville, N. C.
Asheville, N. C.
Pollocksville, N. C.
Greenville, N. C.
Wilson, N. C.
Newport, Ark.
Newport, Ark.
Alton, Ill.
Mooresboro, N. C.
Pinetown, N. C.
Kinston, N. C.
High Point, N. C.
Wilmington, N. C.
Wilmington, N. C.
Latta, S. C.
Charlotte, N. C.
Salisbury, N. C.
Columbia, S. C.
Brooklyn, N. Y.
Wingate, N. C.
Asheville, N. C.
Atkinson, N. C.
New Bern, N. C.
Germany
Hagerstown, Md.
Charlotte, N. C.
York, Pa.
Union City, N. J.
Wilmington, N. C.
Wilmington. N. C.
Durham, N. C.
Durham, N. C.
Asheville, N. C.
Durham, N. C.
Harmony, N. C.

Howard, Margaret Goodson
Howell, Ed. Arthur
Howland, Ralph Lindsay
Hoyle, Lawrence T.
Huckabee, Alice Virginia
Hughes, Eugene Francis
Hughes, Lewis Calvin
Huguely, George Wesley, Jr.
Humble, Hilary
Hundley, Lottie Markham
Huneycutt, Wiley J.
Huss, H. Otho
Hyatt, Donald McIntosh
James, Clyde Burwell
Jarrett, Emanuel James, Jr.
Jenkins, John Robert, Jr.
Jenkins, William Jarrett
Johnson, Frank Roy
Johnson, John Norborne
Johnson, Marion Owen
Johnson, Thomas Philip
Johnson, T. Blair
Jones, Edward H.
Jones, Emerson Philip
Jones, Esther Ruth
Jones, Seymour Cleveland, Jr.
Jordan, Richard Edward
Keegan, William J.
Keever, John Thomas
Keith, Ruth
Kesler, Bennie
Kestler, Charles B.
Kiefer, Jack B.
King, Margaret
Kingsbury, Albert William
Kirby, Carolyn
Knight, Hazel Love
Kolbe, Henry Eugene
La Fevers, Horatio
Langston, Mary
Langston, William Dortch
Langston, W. H., Jr.
Lassiter, Thomas James
Lawless, Lawrence Craddock
Lawrence, Daniel Charles
Leach, Edith Horne
Lee, M. Owen
Leech, Homan Elfred
Leight, John R.
Lemmond, John Henry

Tarboro, N. C.
Goldsboro, N. C.
Henderson, N. C.
Greensboro, N. C.
Albemarle, N. C.
Hampton, Va.
Fountain Inn, S. C.
Washington, D. C.
Wilmington, N. C.
Durham, N. C.
Denver, N. C.
Vale, N. C.
Waynesville, N. C.
Cumberland, Md.
Thomasville, N. C.
Parmele, N. C.
Hobgood, N. C.
Ivanhoe, N. C.
Waynesville, N. C.
Ingold, N. C.
Liberty, N. C.
Vale, N. C.
Auburn, Ala.
Franklin, Va.
Bowman, S. C.
Okolona, Miss.
Newport News, Va.
Southington, Conn.
Lewisville, N. C.
Durham, N. C.
Skipwith, Va.
Concord, N. C.
Pittsburgh, Pa.
Durham, N. C.
Elizabeth, N. J.
Decatur, Ga.
Wilmington, N. C.
Annapolis, Md.
Glen Alpine, N. C.
Goldsboro, N. C.
Goldsboro, N. C.
Goldsboro, N. C.
Smithfield, N. C.
Norfolk, Va.
Sanford, N. C.
Washington, N. C.
Raleigh, N. C.
Sangus, Mass.
Walkertown, N. C.
Matthews, N. C.

Lemon, Marvin Elmer
Lemons, Samuel M.
Lentz, Jack
Lerer, Samuel
Lewis, Allen R.
Lewis, Herbert Lee
Lintner, Newell Van Meter
Loftin, Floyd F.
Lougee, John Horton
Lupton, John Wood
Lutz, Lloyd Luther
Lyerly, Arnold
Lyon, Elizabeth
McAnally, Elizabeth
McClure, Robert Leonard
McCracken, Sarah
McCullers, Ruby Lee
McCullough, Kenneth H.
McDonald, Eleanor Petrie
McDowell, William D.
McGarvey, James Russell
McKaughan, David Lee
McKeithan, Emmet James
McKenzie, Wayland Nash
McKinley, John Preston
McNairy, John Egbert
McRorie, Cyrus Brown
Magruder, Richard Scott
Mahl, George Kenneth
Malm, Webster A.
Mangum, Verna
Mann, Joe Wesley, Jr.
Mann, Marvin Mellard
Margolin, Samuel J.
Marasin, Theodore
Marr, Henry Coburn
Marrow, John Wesley
Martin, Ben Franklin
Massey, Adam B.
Matheson, Edward Branson
Matlock, Ronald J.
Matthews, Leon N.
Melton, Jack Robert
Meyers, John W.
Midgette, Linville Edward
Miller, Ben
Miller, Murray Culbertson
Miller, Thomas J., Jr.
Miller, William Taylor, Jr.

Roanoke, Va.
Reidsville, N. C.
Nashville, Tenn.
Philadelphia, Pa.
Swarthmore, Pa.
Greensboro, N. C.
Leesburg, Va.
Durham, N. C.
Durham, N. C.
Belhaven, N. C.
Shelby, N. C.
Woodleaf, N. C.
Durham, N. C.
Richmond, Va.
Maywood, Ill.
Washington, N. C.
Durham, N. C.
Indiana, Pa.
Wilmington, N. C.
Kershaw, S. C.
Kittanning, Pa .
Kernersville, N. C.
Bostic, N. C.
Norwood, N. C.
Mobile, Ala.
Greensboro, N. C.
Rutherfordton, N. C.
Orlando, Fla.
Ironton, Ohio
Cleveland Heights, Ohio
Bahama, N. C.
Greensboro, N. C.
Saint Matthews, S. C.
Brooklyn, N. Y.
New York, N. Y.
Winston-Salem, N. C.
Roper, N. C.
Henderson, N. C.
Port Norris, N. J.
Mount Gilead, N. C.
Hookerton, N. C.
Bessemer City, N. C.
Charlotte, N. C.
New York, N. Y.
Norlina, N. C.
Hickory Grove, S. C.
Upper Darby, Pa.
Baltimore, Md.
Winston-Salem, N. C.

Moore, John Meredith
Morgan, Thomas C.
Morris, Hugh
Morris, John Watson
Moses, Mary Louise
Moses, Preston Brooks
Moss, Florence
Mullen, James
Murphy, Lenore Marian
Murray, Wendell McCullen
Nachman, Henry D.
Nalls, Mrs. Edna
Narbeth, Arthur Benjamin
Nash, George Earle
Neal, Julian Spencer
Needham, J. K.
Nelson, Robert L.
Newton, Evelyn Elizabeth
Nicholson, Frank C.
Nicholson, Walter Lee
Nicks, Marianna
Norman, James Joseph
O'Briant, G. L.
O'Briant, Esther
Ogburn, Gordon Kellar
Oldham, George Willis
Orem, Nicholas, Jr.
Ormond, Will Newman
Ormsby, Wilbur Stanley
Osborn, Virgil A.
Oser, David John
Ownbey, Sara Elizabeth
Parker, George Hinson
Parker, Harris
Parsons, Margaret Elinor
Pate, Jessie Page
Pate, Robert Hoke
Patton, Robert William
Peabody, Frank Joseph
Peacock, Helen
Peake, James R., Jr.
Pearce, E. Oris
Peet, Willis
Pegram, Robert Wesley
Penny, Wade Hampton
Peppell, Robert Lee
Perrow, Betsy Marshall
Perry, William Elvis
Peters. James Sidney, Jr.

Greenville, N. C.
New Bethlehem, Pa.
Mesic, N. C.
Winston-Salem, N. C.
Norfolk, Va.
Chatham, Va.
Mobile, Ala.
Dothan, Ala.
Warren, Pa.
Durham, N. C.
Hertford, N. C.
Monroe, N. C.
Swarthmore, Pa.
Bogalusa, La.
Leaksville, N. C.
Pfafftown, N. C.
Carlisle, Pa.
Durham, N. C.
Greensboro, N. C.
Charlotte, N. C.
Roxboro, N. C.
Winston-Salem, N. C.
Durham, N. C.
Durham, N. C.
Raleigh, N. C.
Durham, N. C.
Hyattsville, Md.
Hookerton, N. C.
New York, N. Y.
High Point, N. C.
Tampa, Fla.
Asheville, N. C.
Franklin, Va.
Hope Mills, N. C.
Wilkes-Barre, Pa.
Durham, N. C.
Durham, N. C.
Tampa, Fla.
Ardmore, Pa.
Salisbury, N. C.
Norfolk, Va.
Zebulon, N. C.
Leetonia, Ohio
Durham, N. C.
Casma, N. C.
Nazareth, Pa.
Asheville, N. C.
Wendell, N. C.
Newport News, Va.

Peterson, Everett Lindsay
Phillips, Eugene Bryan
Phillips, Margaret
Phillips, Marion S.
Phipps, Glenn Ward
Phipps, Marguerite Elizabeth
Physioc, Willis Johnson, Jr.
Pierce, Ovid Williams
Pittman, Katherine Louise
Plyler, Spencer Carl
Poole, Lelia Allen
Pope, Ruth
Pope, William Allan, Jr.
Powe, Ellerbe, Jr.
Powell, Mary Elizabeth
Powell, James Dewey
Pritchett, Marshall
Ragsdale, William Smith
Ray, Horace Greene
Reade, Eugene Walter
Reed, James Wood, Jr.
Reed, Marvin D.
Reiber, Elmer W.
Reque, Paul Gerhard
Reynolds, R. D. K.
Rhyne, Charlie Sylvanus
Richards, Henry P.
Ricks, Robert Henry
Riddick, Floyd M.
Riddle, Ira Paul
Ripley, Hampton
Robbins, George Lindsay
Roberson, Paul D.
Roberts, Daniel Merritt
Robertson, Frank John
Robeson, James Glenn
Robinson, Harold Manson
Robinson, Isadore
Rochelle, David Benjamin
Rogers, Evelyn
Rogers, Mae
Ross, John Bowen
Rossi, Philip Joseph
Rouse, Elizabeth Armanie
Rowland, Annie Elizabeth
Rowland, Mary Florence
Royall, William Richard
Rozzelle, Frank Cathay
Rucker, Elizabeth Jane

Clinton, N. C.
Staten Island, N. Y.
Durham, N. C.
Thomasville, N. C.
Galax, Va.
Independence, Va.
Stamford, Conn.
Weldon, N. C.
Kinston, N. C.
Misenheimer, N. C.
Raleigh, N. C.
Portsmouth, Va.
Durham, N. C.
Durham, N. C.
Warsaw, N. C.
Holly Springs, N. C.
Charlotte, N. C.
Smithfield, N. C.
Raleigh, N. C.
Durham, N. C.
New York, N. Y.
Hertford, N. C.
New Castle, Pa.
Brooklyn, N. Y.
Fall River, Mass.
Charlotte, N. C.
Elizabethtown, Ky.
Rocky Mount, N. C.
Suffolk, Va.
Fayetteville, N. C.
Winnetka, Ill.
Trinity, N. C.
Robersonville, N. C.
New Bern, N. C.
Philadelphia, Pa.
Greenville, N. C.
Denver, N. C.
Turtle Creek, Pa.
Waverly, Tenn.
Asheville, N. C.
Durham, N. C.
Washington, N. C.
Mount Vernon, N. Y.
LaGrange, N. C.
Durham, N. C.
Durham, N. C.
Wilmington, N. C.
Hendersonville, N. C.
Rutherfordton, N. C.

Rugh, Albert Leon
Rumbaugh, William Glenn
Rush, Robert Herbert
Russ, Gladwyn Taft
Russell, Clarence Watson
Ryon, Thomas Harvey
Sample, Dallas E.
Sample, Jack McCoy, Jr.
Sanders, Julius Taft
Satterfield, William Lloyd
Saunders, Fred Glenn
Saxe, Louis John
Scanlun, David H.
Schein, Louis Leon
Schock, Arch Kerper
Scott, Iredell Montgomery
Seeley, Laura Mae
Sexton, Barden
Sexton, Madge
Shackelford, Agnes Lee
Sharpe, John Allen
Sharpe, Walter Eugene, Jr.
Shaw, John Dickinson
Shields, Wilburn Thomas
Shore, Hoyt Walter
Shuford, Gladys Winston
Sigmon, Charles Victor
Simpson, Marion
Siske, Grady Cornell
Smathers, James Carrol
Smith, Carlton Sexton
Smith, Samuel James, Jr.
Smith, Thornton Beckham
Smoot, Alexander Lee
Snow, Guy Lafayette
Snow, William Brewster
Staats, John Charles
Stanley, Earl Council
Starkey, Marshall Leonidas
Starratt, Ruth
Steele, Frank
Stevens, H. Blair
Stevens, Thomas Hood
Stevenson, Robert Louis
Stewart, Jean
Stiger, Milnor Kimble
Stikeleather, Eileen Caldwell
Stone, Ollie R.
Stowe, James William, Jr.

Saltsburgh, Pa.
Avonmore, Pa.
Washington, D. C.
Laurinburg, N. C.
Durham, N. C.
Washington, D. C.
Elizabeth City, N. C.
Fort Pierce, Fla.
Chester, S. C.
Roxboro, N. C.
Apex, N. C.
Cleveland, Ohio
Durham, N. C.
Bronx, N. Y.
Philadelphia, Pa .
Fair Bluff, N. C.
Ozone Park, N. Y.
Relay, Md.
Bahama, N. C.
Durham, N. C.
Lumberton, N. C.
Burlington, N. C.
Meriden, Conn.
Durham, N. C.
Charlotte, N. C.
Lexington, N. C.
Denver, N. C.
Monroe, N. C.
Pleasant Garden, N. C.
Asheville, N. C.
Danville, Va.
Absecon, N. J.
Durham, N. C.
Salisbury, N. C.
Round Peak, N. C.
Durham, N. C.
Saint Augustine, Fla.
Hendersonville, N. C.
Greenville, N. C.
Chevy Cha'se, Md.
Lillington, N. C.
Goldsboro, N. C.
Princeton, N. C.
Winston-Salem, N. C.
Charlotte, N. C.
Williamsport, Pa .
Asheville, N. C.
Durham, N. C.
Belmont, N. C.

Straughan, Thomas John Street, Richard McIntosh Stuart, Charles Edward Swain, Roger Whitfield Swaringen, George Hubert
Swaringen, Richard
Sykes, Grover Paris
Tanner, Charles S.
Tart, T. Eugene
Tate, Mary Jane
Taylor, Catherine Cornelia
Taylor, James Patterson
Taylor, Ralph Henderson
Teague, Mildred Banks
Teller, Sidney Simon
Terrell, Marie
Thomas, Edward Galloway
Thomas, Thomas, Jr.
Thorne, Sam T., Jr.
Tilley, Charles
Timmons, Edward Booth, Jr.
Tolson, Edward Lawrence, Jr.
Trantham, Jack Elmer
Trexler, John Caldwell
Tucker, John Layton
Turner, Franklin
Turner, Numa Fletcher
Underwood, Norman Bruce
Upchurch, Oliver Wingate
Utley, Clarence Bailey, Jr.
Venters, Walter
Vick, George Elliott
Waddell, Kathleen Elizabeth
Walter, George Henry
Wang, Chi Nyok
Ward, James Adolphus
Warwick, Robert Durant
Weaver, Henrietta
Weaver, William Fiske
Webb, Charles Rice
Webb, Joseph Hooper
Wellons, James A., Jr.
Welton, Clarence Porter
Wentz, Lester Hansell
White, Jack Roland
Whitefield, G. C.
Whitehead, Henry Gibson
Whitehead, John W.
Williams, John E.

Charleston, W. Va.
Sanford, N. C.
Rochester, N. Y.
Durham, N. C.
Norwood, N. C.
Cornelius, N. C.
Mebane, N. C.
Edgewood, R. I.
Newton Grove, N. C.
South Bend, Ind.
Rocky Mount, N. C.
Bristol, Pa.
Charlotte, N. C.
Burlington, N. C.
Stamford, Conn.
Durham, N. C.
Greenville, N. C.
Laconia, N. H.
Littleton, N. C.
Durham, N. C.
Charlotte, N. C.
Washington, D. C.
Brevard, N. C.
Salisbury, N. C.
Philadelphia, Pa.
Clarksville, Va.
Raleigh, N. C.
Toledo, Ohio
Durham, N. C.
Norfolk, Va.
Union Springs, Ala.
Kinston, N. C.
Bonlee, N. C.
Orangeburg, S. C.
Durham, N. C.
Hendersonville, N. C.
Charlotte, N. C.
Durham, N. C.
Asheville, N. C.
W. Collingswood, N. J.

Decatur, Ga.
Smithfield, N. C.
Durham, N. C.
Schoolfield, Va.
Tidioute, Pa.
Durham, N. C.
Dunn, N. C.
Dunn, N. C.
Wingate, N. C.

Williams, William Alfred
Williams, Lemuel Ray
Williams, Lonnie W.
Williams, Louis Napoleon
Williams, Russell Avery
Williams, Wilbert Liewellyn
Willis, Candler
Winslow, Charles Hudson, Jr.
Womble, William G.
Woodard, Ralph Harwick
Woodroe, Clarence Foyles
Woods, Clinton McMillan
Woodward, James Whilden
Woolf, Louis B.
Young, Percy Whitaker
Zimmerman, John Conrad
Zuckerman, Isadore

Hertford, N. C.
Lincolnton, N. C.
Shelby, N. C.
Battleboro, N. C.
Siler City, N. C.
Lexington, S. C.
Candler, N. C.
Dayton, Pa.
Raleigh, N. C.
Selma, N. C.
Richmond, Va.
Marion, S. C.
Columbia, S. C.
Charlotte, N. C.
Walkertown, N. C.
Saint Matthews, S. C.
Durham, N. C.

FRESHMAN CLASS

Abbott, Kenneth Gee
Abernathy, Andrew David, Jr.
Adams, Dale Herbert
Adams, Edna Lee
Adams, James Lexie
Aiken, Marshall Dandridge
Alexander, Hugh Quincy
Allen, Arthur Edgar
Allen, Charles Nesbitt
Allen, George Herbert
Allen, Lillian Burton
Allen, Ralph Waldo
Almy, Donald Comstock
Ammons, James Leon
Anderson, James Garrett
Anthony, Peyton Tunstall
Armfield, James Hendrix
Arnold, Almond Edwin
Baggs, George Edward
Baker, Frederick Lafayette
Baker, Harold Harvey
Baker, William Gary
Ballard, Loy Griffin
Ballard, Lacy Henry
Barber, Kathleen
Barker, S. Jane
Barker, Mrs. Lessie Pope
Barham, Roy B.
Barnett, Frank Eugene

New Eagle, Pa.
Granite Falls, N. C.
Vandergrift, Pa.
Durham, N. C.
Durham, N. C.
Wilson, N. C.
Durham, N. C.
Lenoir, N. C.
Wilmington, N. C.
Oyster Bay, N. Y.
Durham, N. C.
Brewster, Mass.
Providence, R. I.
Red Springs, N. C.
Asheville, N. C.
Greenville, N. C.
Mount Airy, N. C.
West New Brighton,
Staten Island, N. Y.
Chelsea, Mass.
Oxford, N. C.
Hendersonville, N. C.
Nichols, S. C.
Catawba, N. C.
Biscoe, N. C.
Durham, N. C.
Durham, N. C.
West Durham, N. C.
Kenly, N. C.
Painesville, Ohio

Bateman, Margaret Elizabeth
Beard, Thomas Elwood
Beaser, Robert Kohl
Beasley, Roy Preston
Bell, William Polson
Bellamy, Iris Boyette
Bennett, John Carlisle
Berkmueller, Herbert Edward
Berry, John Chester
Berry, Joseph Andrew, Jr.
Betz, George Max
Beverly, Edward Dula
Blackson, Clarence Everett
Bobo, Wallace Marion
Boesch, Betty Margaret
Boney, Victoria A.
Boney, Wilfred Bellinger
Booker, John Parks
Bost, Edwin McLead
Bostic, Clifford Newberry
Bowden, Sidney Lingle
Bowen, David Garland
Brackbill, Albert Landis
Bradshaw, William Dennis
Bradsher, Charles Kilgo
Bradsher, Preston
Brank, Roy A.
Braswell, Margaret Louise
Bray, Jerry Garrett
Brazwell, William Allison
Breedlove, Evelyn Caroline
Bridgers, Everett Roland
Brinkley, Gladys
Brosius, Arthur
Brown, George Roy
Brown, Mark Wiley, Jr.
Brownell, William Raymond
Brownlee, John Hubert
Browning, Mary Faith
Buhite, Jesse Paul
Burgart, Raymond Edmund
Burgess, James Edward
Burmeister, Louis Rene
Burnette, Robert Troy
Burwell, Alice Littlepage
Butler, Robert Turner
Bynum, Edwin Council
Byrd, Wheeler Vaughan
Caison, Cicero Hillery

Roper, N. C.
Durham, N. C.
Portsmouth, Va.
Craddocksville, Va.
Capron, Va.
Ahoskie, N. C.
Asheville, N. C.
Englewood, N. J.
Durham, N. C.
Orangeburg, S. C.
Wildwood, N. J.
Laurinburg, N. C.
Apollo, Pa.
Greenville, S. C.
Durham, N. C.
Durham, N. C.
Durham, N. C.
Charlotte, N. C.
Erwin, N. C.
Greenville, N. C.
Durham, N. C.
Lake City, S. C.
Gap, Pa.
Staunton, Va.
Petersburg, Va.
Oxford, N. C.
Canton, N. C.
Whitaker, N. C.
South Norfolk, Va.
Johnson City, Tenn.
Oxford, N. C.
Wilson, N. C.
Stem, N. C.
Avoncuale, Pa .
Greenwood, S. C.
Asheville, N. C.
Windsor-Ontario, Can.
Philadelphia, Pa .
Durham, N. C.
Vandergrift, Pa.
New Kensington, Pa.
Old Trap, N. C.
Riverside, R. I.
Greenville, N. C.
Warrenton, N. C.
Norfolk, Va.
Statonsburg, N. C.
Hamlet, N. C.
Clinton, N. C.

Caldwell, Edwin M., Jr.
Camp, Irvin L., Jr.
Campbell, Chester A.
Campbell, Keith
Cannady, Ozelle
Cappelli, Theodore
Card, Helen Kendrick
Carden, Frank Stamper
Carey, Leonard Clarke
Carlson, Gustaf Alfred
Carpenter, Claude Henkel
Carpenter, Ernest Betts
Carson, Frederick Richard
Ceigler, Alfred Bernard
Chapman, Henry Nyman
Cheek, Henry Rudolph
Cherry, Dwight Palmer
Clark, David Sterling
Clark, Horace
Clark, James Bridgers
Clark, Louis James
Clarke, Randolph Thornton
Clayton, Walter William
Clifford, Patrick A.
Cochrane, Archie Montgomery
Cockman, Hazel
Coffman, Rawlins
Cole, Oscar Philip
Coley, Burwell Temple
Colley, Nelson Crosson
Combs, Frank C.
Connelly, Lillie Mae
Connelly, Sara Mae
Coombs, Raymond Frank
Cope, Thomas Edward
Copeland, William Robert
Cordray, William Henry
Cox, Caroll Eastburn
Cox, Curtis Atlas
Cox, Alfred LeRoy
Cozart, Helen Fontelle
Craig, Hoyle William
Crary, Joe Bishop
Crenshaw, Claire Tappan
Critchley, John Joseph
Crocker, William Collins
Crocket, John Alexander
Croom, Rodney Bradford
Cross, Randall

Edgewood, R. I.
Johnstown, Pa.
Ford City, Pa.
Gladstone, Mich.
Durham, N. C.
Washington, D. C.
Durham, N. C.
Chattanooga, Tenn.
Vineland, N. J.
New Haven. Conn.
Durham, N. C.
Durham, N. C.
Charlotte, N. C.
Nashville, Tenn.
Hagerstown, Md.
Atlantic, N. C.
Bayboro, N. C.
New Haven, Comn.
Peoria, IIl.
Henderson, N. C.
Boston, Mass.
Windsor, Va.
Richmond. Ya.
Washington, D. C.
Bridgewater. Mass.
Durham, N. C.
Philadelphia, Pa.
Durham, N. C.
Durham. N. C.
Mount Ranier, Md.
Pittsfield, Mass.
Northside, N. C.
Durham, N. C.
Kennebunk, Maine
Red Springs, N. C.
Windsor, N. C.
Philadelphia, Pa.
Kenneth Square, Pa.
Bolivia, N. C.
Sanford, N. C.
Durham, N. C.
Durham, N. C.
Brevard, N. C.
Asheville, N. C.
Yonkers, N. Y.
Suffolk, Va.
King-of-Prussia, Pa.
Burgaw, N. C.
Gadsden, Ala.

Crowder, William Frank
Crowell, Robert J.
Cuddy, James Davis
Currin, Robert Elliott
Curry, Harold David
Curry, Hugh Arthur
Cutler, Zeb Vance
Dalton, Robert Hatcher
Daniel, John Howard
Daniel, Thomas Nance
Oanner, James Harvey
Darlson, Andreas John
Daugherty, John Marshall
Daughtrey, William Richard
Davies, Katherine Mary
Dawson, Helen Marie
DeCorse, Ellsworth Baisley
Deichman, Donald Edward
Dein, George
Dein, Harry Leonard
De I loss, Emmett
Denny, Francis Irvin
Diskin, Michael Joseph
Dobson, Joseph Baker
Donohue, William Kavnaugh
Dorson, Benjamin Samuel
Doughty, Joseph Boyne
Douglas, Anna Gertrude
Draughon, Lucile Byrd
Draughon, Mae Belle
Duck, Edwin Harry
Dudley, Robert Allen, Jr.
Duttera, Maurice
Duttera, Wayne
Eagles, Joseph E.
Eason, Francis Halstead
Eason, Robert
Eaton, Dorothy
Eckhert, Alfred Frank
Edgerton, Griffin Gabriel
Edwards, Sidney Martin
Eigner, Sidney
Ellis, Elton Willard
Ellis, Eulis E.
English, Eva Davis
Ershler, Arthur Manuel
Eskilson, Arnold
Evans, Harold Dean
Ewell, George Watkins, Jr.

Peachland, N. C.
Southmont, N. C.
Troy, S. C.
Broxton, Ga.
Point Pleasant, W. Va.
Point Pleasant, W. Va.
Alliance, N. C.
Holland, Va.
Warrenton, N. C.
Nashville, Tenn.
Mullins, S. C.
East Orange, N. J.
Jeannette, Pa.
Newport News, Va.
New Hartford, Conn.
Durham, N. C.
Baltimore, Md.
Baltimore, Md.
Atlantic City, N. J.
Atlantic City, N. J.
Thornton, W. Va.
Wilson, N. C.
Pittsburgh, Pa.
Randleman, N. C.
White Plains, N. Y.
Lynn, Mass.
Ronceverte, W. Va.
High Point, N. C.
Durham, N. C.
Durham, N. C.
Martinsburg, W. Va.
Vineland, N. J.
Dushore, Pa.
Dushore, Pa.
Wilson, N. C.
South Mills, N. C.
Greenville, N. C.
Asheville, N. C.
Highland, N. Y.
Kenly, N. C.
Fremont, N. C.
Lynn, Mass.
Clayton, N. C.
Bahama, N. C.
Mount Olive, N. C.
Hudson, N. Y.
Beacher, Ill.
Peoria, Ill.
Corozal, Panama Canal

Faris, Clinton Morehead
Ferrell, George Daniel
Few, Marion Lee
Fields, Riley Clinton
Finger, Thomas L.
Fitzgerald, Robert Lee, Jr.
Fletcher, Geraldine Meredith
Forbes, John Stewart, Jr.
Forlines, Ruth Rebecca
Fossa, Albert
Foster, Annie Lois
Foster, Winthrop Brewer
Fowler, Richard William, Jr.
Fretwell, Sam J.
Franklin, Philip Lair
Fulford, Paul E.
Fulford, Vera Carson
Fulford, William Allen
Fulmer, Henry Philpot
Furgerson, Ernest Whitmal
Futrell, Ashley Brown
Gaddis, Adam Marr
Gaddy, Hugh Gifford
Gainey, Lucile Buchanan
Gallia, Joseph, Jr.
Gannaway, Gilmer George
Gantt, Stough Bryson
Gardner, Maxwell F. Garren, Kenneth Howard
Garrett, John Pressley
Garrett, John Joseph
Garrett, Thomas Jefferson
Garriss, Walter Thomas
Gartelman, William Henry
Gatling, William Lawrence
Gehret, Robert Kenneth
Germino, Hugo Louis
Gilbert, John
Gilmer, Edward C.
Gilmore, Eugene Tyler
Glascock, Arthur Lee
Glasson, Marjorie
Glover, Eugene Colburn
Glymph, Virginia Jewell
Gold, Lawrence William
Gooch, Jane Louise
Grahl, Maurice Reid
Gray, Montgomery Johns
Green, James Ferrell

Durham, N. C.
Atlantic City, N. J.
Greer, S. C.
Carthage, N. C.
Maiden, N. C.
Pine Level, N. C.
McColl, S. C.
Newark, N. J.
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Providence, R. I.
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Bridgton, Maine
Kinston, N. C.
Anderson, S. C.
Baltimore, Md.
Peoria, Ill.
Durham, N. C.
Durham, N. C.
Philadelphia, Pa.
Louisburg, N. C.
Wilson, N. C.
Brown, Md.
Morven, N. C.
Fayetteville, N. C.
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Draper, Va.
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Chambersburg, Pa .
Hendersonville, N. C.
Bennettsville, S. C.
Southport, N. C.
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Margarettsville, N. C.
Savannah, Ga.
Gastonia, N. C.
Altoona, Pa .
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Durham, N. C.
Roanoke Rapids, N. C.
Durham, N. C.
Rocky Mount, N. C.
Durham, N. C.
Ashburn, Ga.
Ocean Grove, N. J.
Cynwyd, Pa.

Green, Thomas Erastus, Jr.
Gregory, Nathaniel Alexander
Griffin, Margaret Ann
Hall, Mary Lucile
Hammond, Clifford Henslee
Hamrick, Waite Carlisle, Jr.
Hardy, Joseph Allen
Hargrove, Theodore Augustus
Harrill, Freeman Bronner
Harris, Margaret L.
Hart, Gus
Harton, James Weldon
Hay, William Thayer
Hayes, Felton Belmont
Hayes, Frederick Legro
Hayes, William Harold
Hefren, Marjorie Pearl
Hege, Spencer Lee
Helms, Isaac Jay
Henderson, Paul Carman
Henly, Edith Mae
Herbert, Clarence
Hermelink, Liesel
Herrington, Marvin S.
High, Christine Mae
Hildebrant, Ernest W.
Hill, Burt Grindstaff
Hill, John Darius
Hill, Parker Whitmell
Hines, Norman Dee
Hines, William G.
Hinshaw, Roy Milburn
Hipps, James Robert
Hoggard, Richard Norfleet
Holland, Elizabeth Deans
Holmes, George Wallace
Holt, Frank Lee
Holt, Harry Worth
Hood, Roland Clair
Horne, Oliver Wendell
Howard, Harvey Richard
Howard, Norris Merle
Howard, William Kenneth
Howell, James Robert
Howie, Martha
Hoyle, Mary
Hudgins, Herbert Andrew
Hughes, George Granville
Hull, Elbert Lee
Honeycutt, Eunice Claire

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Woodland, N. C.
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Rowland, N. C.
Gaffney, S. C.
Bedford, Va.
Canton, N. C.
Spindale, N. C.
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Hartsville, S. C.
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Bloomfield, N. J.
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Brooklyn, Mass.
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Hertford, N. C.
Leakesville, N. C.
Rockingham, N. C.
Freeport, N. C.
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Stamford, Conn.
Marburg, Germany
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Sunbury, N. C.
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La Grange, N. C.
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Winston-Salem, N. C.
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Vienna, Ga.
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Greensboro, N. C.
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Spencer, N. C.
Mount Airy, N. C.
Albemarle, N. C.

Hunter, Roy Emerson
Hurst, Charles Claiborne
Hutson, Monroe
Hyatt, Charles David
Hyatt, Mary Elizabeth
Ingle, Carlyle
Isley, Sessler Carlysle
Jaffe, David
James, Wiley Byrd
Johnson, Ernest Robert
Johnson, Eugene Worth
Johnson, Herbert Clifton
Johnson, John E.
Johnson, Kenneth D.
Johnson, Leigh Whitfield
Johnson, Robert Lee
Johnston, James B., Jr.
Jones, Cabell
Jones, Carl, Jr.
Jones, George Newton Walters
Jordan, Arthur George
Judd, James Lewis
Junkin, John Edward
Karp, Sidney
Karpinsky, William
Kasper, Carl James
Kearns, Edward Frank
Keck, James Louis
Keefer, Charles Milton, Jr.
Keiser, Richard Austin
Kellam, Edwin Clay
Kelly, Wilma
Kernis, Manuel George
Kersey, Arthur Thomas
Kesler, Archie Dean
Kesler, Bennie Robert
King, Charles Merriman
King, Margaret Henry
Klare, Robert Andrew
Kloss, John Shelley
Knight, Charles Wright
Knight, Kenneth Thigpen
Knott, Lawson Beasley
Koffler, Arthur
Kornegay, John Royal
Kramer, Albert Thomas
Kriel, Herbert Franklin
Kukendall, Donald Austin
Lackey, Riley Howard
Lackey, William Dixon

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Waynesville, N. C.
Polkton, N. C.
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Apex, N. C.
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Baltimore, Md.
Woodcliff, N. J.
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Shelby, N. C.

Land, John Webb
Lashley, Irvin Eugene Lassiter, Walter G. Leach, Charles Edward Leary, Dorothy Cornell
LeGwin, LeRoy Clifton
Lemon, Creed King, Jr.
Lemon, Glen Hampton
Lesher, William Carson
Levin, Jacob
Lewis, Alice Mae
Lewis, Hubert Murry
Lewis, Leonard Barzillia
Lilly, Henry Marvin
Linney, Kenneth Boyle
Linzemeyer, Adam James
Lippincott, Joseph Robert
Livengood, Wesley Amos
Lloyd, George Arthur
Lockey, Wilfred Charles
Long, E. W., Jr.
Long, Irvin Bittle
Long, John Cordner
Long, John Frederick
Long, Mary Irene
Love, John Ruble
Lovell, Worden French
Lucas, Edith Craft
Lucas, Robert Lester
Lundgren, Carl Raymond
Lutz, Lloyd Luther
Lyerly, Joseph Edward
Lynn, Iowa Hugh
Lyon, Jessie Mae
McAnally, S. Wesley
McCauley, Arthur Franklin
McCeney, George Dudley
McClees, Manson
McCullough, Sam Bowyer
McDonald, A. Carlton
McDustrell, Howard G.
McGhee, Mary Frances
McGhee, Virginia
McKenzie, James Reginald
McLean, John Alexander
Malone, James Robert
Mann, Robert Hoyl
Manning, Asa James
Margolis, Samuel
Marion, Donald F.

Hamlet, N. C
Reidsville, N. C.
Smithfield, N. C.
Baltimore, Md.
East Orange. N. J.
Wilmington, N. C.
Roanoke, Va.
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Reading, Pa.
Durham, N. C.
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Henderson, N. C.
Durham, N. C.
Greensboro, N. C.
Boone, N. C.
Navesink, N. J.
Asbury Park, N. J.
Winston-Salem, N. C.
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Vineland, N. J.
Norfolk, Va.
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W. New Brighton, N. Y.

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Concord, N. C.
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Quincy, Mass.
Charlotte, N. C.
Leland, N. C.
New Haven, Conn.
Shelby, N. C.
Salisbury, N. C.
Raleigh, N. C.
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Richmond, Va.
Baltimore, Md.
Upper Marlboro, Md.
Oriental, N. C.
Point Pleasant, W. Va.
Jackson Springs, N. C.
Greenville, N. C.
Atlanta, Ga.
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Gibson, N. C.
Goldsboro, N. C.
Durham, N. C.
Cumberland, Md.
Williamston, N. C.
Durham, N. C.
Harrisburg, Pa.

Martin, Gcorge Irvin
Martin, Russell Penn
Martin, William Andrew
Mason, Edwin Lowell
Mathews, Albert Currie
Mattox, S. Edwin
Mauney, Lester Merrill
May, Oliver Newton
Maynard, Margaret Zelene
Meeler, Lottie Mae
Mesh, Harry Theodore
Miles, Horace Blackwell
Miller, Gilbert Shelley
Minter, John DeLabar
Moore, DeArmond
Moore, Frank Richardson
Moore, William Joseph
Morgan, Zane Vantine
Morrill, Joseph Collier
Mortimer, Joseph Finton
Moyler, Helen Calvert
Mullen, Harold Herbert
Munday, Carl Austin
Munden, Kenneth White
Murchison, Alton Guthrie
Murray, Jesse Frederick
Myers, John Albert
Mylod, Edward Louis
Naisby, John Russell
Nash, Paul Jones
Newbern, Walter Relfe
Newman, Philip Edmund
Newsome, Dorothy
Newsom, Arthur Marvin, Jr.
Newton, Orson Benjamin
Nichols, William Cole
Oakley, Gretha Blan
O'Briant, Albert
O’Keef, Fannie Corbett
Orr, George Wells
Osborne, James Stancil
Padruzzi, Wallace
Paine, Robert Sherrod
Parker, Carlton McKenzie
Parker, Minor Luen
Parker, William Edward
Pate, Archibald Hanes
Patten, Lawrence
Patterson, Carmen
Peeling, William Edward

Washington, D. C.
Jamesville, N. C.
Mullins, S. C.
Charlotte, N. C.
Atlantic City, N. J.
Penhook, Va.
Piedmont, S. C.
Durham, N. C.
Durham, N. C.
Paces, Va.
New York, N. Y.
Atlantic City, N. J.
Eufola, N. C.
Laurens, S. C.
Charlotte. N. C.
Durham, N. C.
Roxboro, N. C.
Bradford, Pa.
Charlotte, N. C.
Staten Island, N. Y.
Franklin, Va.
Durham, N. C.
Durham, N. C.
Elizabeth City, N. C.
Fayetteville, N. C.
Durham, N. C.
Oxford, N. C.
Glen Ridge, N. J.
Riverton, N. J.
Kernersville, N. C.
Durham, N. C.
Southport, N. C.
Durham, N. C.
Littleton, N. C.
Petersburg, Va.
Rocky Mount, N. C.
Bunnlevel, N. C.
Roxboro, N. C.
Wilmington, N. C.
Winston-Salem, N. C.
Charlotte, N. C.
Meriden, Conn.
Buchanan, Va.
Brevard, N. C.
Mount Hope, W. Va.
Durham, N. C.
Goldsboro, N. C.
New Bern, N. C.
Greensboro, N. C.
York, Pa.

Pemberton, Emily
Peery, Owen Blaine
Pettigrew, James Alexander
Phillips, James Henry
Phipps, Julian Tyree
Pisarra, Richard J.
Poe, John Robert
Plowden, Samuel Theodore
Poleman, Herman Alexander
Pollard, Mary Elizabeth
Pool, Aaron Leister
Poole, Henry Stevenson
Powell, Jordan Beale
Powell, Rex Glenn
Power, Gordon Gilbert
Powers, Alexander Kinchen
Prichette, James Byron
Proctor, John Sherrill
Purvis, Bennie Howell
Pyle, Robert Chester
Ragan, Virginia
Rankin, James Eugene
Rasberry, Howell
Rawlings, Wiley Green
Reder, Edward George
Reed, William Alexander
Reed, William Frederick
Respass, George W.
Reynolds, Julian Louis
Reynolds, Royal Winston
Rich, Charles Franklin
Richardson, James Franklin
Rickman, William Villines
Riddick, Edna Annie
Rinner, Ralph Raymond
Ripley, Wilder Harding
Rippard, Lyle Fry
Rivenbark, Walter Murphy
Roberson, Nancy Elizabeth
Roberts, Rupert Archie
Robertshaw, Donald
Robinson, Albert Ira
Robinson, Nola Kate
Rodgers, Mary Eleanor
Rogers, Roger Gray
Rogers, Mae
Rogers, Uldine Edna
Rohrbaugh, Ralph Norman
Rome, Sidney R.
Rose, Beverly Moore

Durham, N. C.
Bluefield, Va.
Florence, S. C.
Charlotte, N. C.
Rocky Mount, N. C.
Scarsdale, N. Y.
Durham, N. C.
Sumter, S. C.
Shreveport, La.
Durham, N. C.
Rudy, Pa.
Rocky Mount, N. C.
Franklin, Va.
Holly Springs, N. C.
Baltimore, Md.
Sanford, Fla.
Reidsville, N. C.
Charlotte, N. C.
Durham, N. C.
Wilmington, N. C.
Gastonia, N. C.
Asheville, N. C.
Kinston, N. C.
Emporia, Va.
Long Island, N. Y.
Vandergrift, Pa .
New York City, N. Y.
Pinetown, N. C.
Glen Cove, L. Is., N. Y.
Clio, Ala.
Candler, N. C.
Monroe, N. C.
Roseland, Va.
Suffolk, Va.
Coshocton, Ohio
Winnetka, Ill.
Farmville, Va.
Wallace, N. C.
Durham, N. C.
Sylvania, Pa.
Collingsdale, Pa .
Durham, N. C.
Durham, N. C.
East Northfield, Mass.
Creedmoor, N. C.
Durham, N. C.
Durham, N. C.
Highfield, Md.
Hartford, Conn.
Durham, N. C.

Rosser, Katie Lawrence
Roth, Chauncey Eugene
Rouse, William Bryan
Roxby, Bruce Steele
Royall, Rebecca Carroll
Ruffin, Jennings Bryan
Rupp, Robert Martin
Russ, James Burnice
Russell, Annie Gertrude
Ryan, Carl Schurz
Sanner, Harry Cleveland
Sapper, Frederick William
Sarota, Benjamin
Saunders, Jack Edward, Jr.
Sawyer, Hugh Alton
Schnure, Howard Hopkins
Schrider, Alfred Vincent
Scott, Hoyle Utley
Scott, William Kenneth
Scribner, William Daniel
Seiler, Hawley Howard
Sellars, Elizabeth
Sellars, Nellie Louise
Sexton, Thomas Giles
Shannon, Reuben McPaul
Shankle, Martha Catherine
Shepherd, Lee Jackson
Sher, Louis
Sherman, George
Sherwood, Revel Edwin
Short, Charles McCoy
Shugart, Dorothy Holton
Sikes, Claude Alex.
Sillman, Arthur Carl
Simms, Harold George
Simms, John D.
Simpson, John Alex
Sink, Joe Stanford
Skinner, Joseph Langdon
Skinner, Mary Winborne
Smith, Elsie Margaret
Smith, Eugene Theophilus
Smith, Frank Fervell
Smith, Gordon Delma
Smith, Harry Lee
Smith, Ned Raeford
Smith, Ora Lee
Smith, Richard Warren
Smith, Robert Newton
Smith, William Carey

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Wilkes-Barre, Pa.
Goldsboro, N. C.
Swarthmore, Pa.
Smithfield, N. C.
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Southport, N. C.
Durham, N. C.
Swarthmore, Pa.
Baltimore, Md.
Erie, Pa.
Lynn, Mass.
Wentworth, N. C.
Mount Airy, N. C.
Selingsgrove, Pa.
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Durham, N. C.
Butler, Pa.
Canton, Ohio
Charlotte, N. C.
Burlington, N. C.
Mebane, N. C.
Bahama, N. C.
Monroe, N. C.
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Durham, N. C.
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Ayden, N. C.
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Albemarle, N. C.
Worcester, Mass.
Greenville, S. C.
Goldsboro, N. C.

Smithdeal, Foss
Sneeden, Mary Steele
Sobel, Jack Harry
Speas, Richard Ward
Spence, Curtis Taylor
Spence, Willie Cashwell, Jr.
Sperling, Joseph Jesse
Stadiem, Myer Nathan
Staley, Walter Robert
Starling, James Richard
Starnes, Wayne Gillespie
States, Thomas William
Stearns, William Montgomery
Steimle, Edward Alfred
Stem, John Mayes
Sterrett, Robert Wendell
Stevens, Allan Carroll
Stevens, Willis Roswell
Stewart, Ben Phillip
Stewart, James
Stith, Frank Albert
Stith, Robert Boyd
Stoddart, Virginia
Stonestreet, Guy Wilmer
Stowe, Henry Gilbert
Street, M. Eugene
Strother, Helen Cade
Strowd, Helen Branson
Stuh1, George
Styers, James Henry
Suther, William Kenneth
Taft, Edmond Hoover
Taylor, George Stephen
Taylor, George William
Taylor, Godfrey Nutall
Taylor, Joseph McCormick
Tatum, William Gilchrist, Jr.
Teeter, Robert Henry
Terry, Lewis Isaac
Thomas, Milmont Carlos
Thomas, Henry Evans, Jr.
Thomas, Lucie Hall
Thompson, Horace J., Jr.
Thompson, Robert Barr
Thorpe, Otoo D.
Todd, Edward
Todd, Gene E.
Troxell, William Shearer
Troxler, Therman Joseph

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Durham, N. C.
Rocky Mount, N. C.
Goldsboro, N. C.
Newton Grove, N. C.
Gastonia, N. C.
Dover, N. H.
Lyndhurst, N. J.
Oxford, N. C.
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Washington, D. C.
Raleigh, N. C.
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Charlotte, N. C.
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New York City, N. Y.
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Belmont, N. C.
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Durham, N. C.
Durham, N. C.
Chelsea, Mass.
Winston-Salem, N. C.
Troutman, N. C.
Greenville, N. C.
Florence, S. C.
Madison Heights, Va.
Swarthmore, Pa.
Providence, R. I.
McColl, S. C.
Charlotte, N. C.
Bahama, N. C.
Broadway, N. C.
Charlotte, N. C.
South Hill, Va.
Indiana, Pa.
Southport, N. C.
Moyock, N. C.
Spencer, N. C.
Rochester, N. Y.
Durham, N. C.
Elon College, N. C.

Truesdale, Mildred Ruby
Trussell, Elmer Chandler
Tucker, William Eric
Tuckwiller, William Dotson
Turlington, Elton Grey
Tynes, Robert Brockwell
Tyson, Woodrow Wilson
Umstead, Christine Arnold
Umstead, Otie Hamlin
Valley, Margaret Stuhl
Van Denbergh, Frederick A.
Vaughan, Charles Gilbert
Vaughan, Robert McNeal
Vickers, Cecil Newton
Vickers, Clyde L.
Vickers, Lee Elmer
Vickers, William Horner
Voorhees, Robert Steckel
Walker, Robert Butler
Waller, Thomas Hall
Walters, Noah Heber
Ward, Myrtice Charlotte
Warlick, Sam Alexander
Warren, Howard Austin
Warrington, John Theodore
Washburn, Edward Durham
Watson, George A.
Watts, Sidney James, Jr.
Watts, William Murray
Weaver, Artis Elizabeth
Wemyss, Walter Francis
Werner, Albert Henry
West, Herbert Jackson
West, Robert Lee
Westcott, Richard Jerrell
Weyersburg, Albert Charles, Jr.
White, Herbert
White, Jiles Horton
Whitehead, Ola Belle
Whitehead, Oren Leonidas
Whitfield, W. E.
Wilkinson, David
Williams, Annie Crocket
Williams, Charles Irving
Williams, Ernest Newsom
Williams, Eugene Hughes, Jr.
Williams, Wilbert Llewellyn
Wilson, Paris Franklin
Wood, Fred Milton

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Charleston, W. Va.
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Mebane, N. C.
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Hendersonville, N. C.
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Jackson, N. C.
Glasgow, Ky.
Durham, N. C.
Durham, N. C.
Durham, N. C.
Durham, N. C.
Atlantic City, N. J.
Mount Vernon, \a.
Leakesville, N. C.
La Grange, N. C.
Durham, N. C.
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Shelby, N. C.
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Mount Vernon, N. Y.
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Warsaw, N. C.
Warsaw, N. C.
Merchantville, N. J.
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Hurdle Mills, N. C.
Asheville, N. C.
Wilmington, N. C.
Vineland, N. J.
Franklin, Va.
Durham, N. C.
Lexington, S. C.
Fallston, N. C.
Vineland, N. C.

Wood, John Wesley
Wood, Thomas Phillips, Jr.
Woodall, John Reese
Woodlief, Rufus Kirklañd
Woodlief, Wayne Gerald
Woods, Hubert Taylor
Wright, Harold Burhans
Wyche, Mary Ellen
Wyllie, Charles Glenn
Wyman, William Hazen
Wynn, Henry
Yardley, Charles Bertram
Yelverton, George Elliot
York, Elizabeth Rue
York, Mary Anne
Young, Downing Banks
Young, Charles Fred
Zimmerman, John Joseph

Hanes, N. C.
Rockingham, N. C.
Marcus Hook, Pa.
Kittrell, N. C.
Kittrell, N. C.
Durham, N. C.
Westfield, N. J.
Weldon, N. C.
Brooklyn, N. Y.
Painesville, Ohio
Lykens, Pa.
Columbus, Ohio
Eureka, N. C.
Morris Plains, N. J.
Morris Plains, N. J.
Southport, N. C.
Charlotte, N. C.
Durham, N. C.

TEACHERS ENROLLED IN UNDERGRADUATE COURSES

Adams, Edna
Boney, Victoria
Bowen, Virginia
Bridges, Jacob Hal
Bryan, Rose Ellwood
Callahan, Mary Elizabeth
Carpenter, Lilly Mae
Clippard, Katharine Murchison
Cockerham, Grace
Council, Clara
Cowan, Ida
Culp, Amanda Caroline
Darnell, Ida Carver
Gilmore, Camilla Mae
Greene, Fern
Hart, Mary Vann
Heflin, Margaret
Jones, Eunice
Jones, May Strawbridge
Lansdell, Nancy Elizabeth
Larkin, Mrs. L. C.
Love, Mrs. R. M.
McGary, Margaret
Markham, Lela
Martin, Jewell
Moize, Vivian
Moss, Kathleen
Mullen, Edith Kells

Durham, N. C.
Durham, N. C.
Greenville, S. C.
Lattimore, N. C.
Durham, N. C.
Durham, N. C.
Durham, N. C.
Camden, S. C.
Elkin, N. C.
Durham, N. C.
Durham, N. C.
Dunn, N. C.
Durham, N. C.
Pittsboro, N. C.
Durham, N. C.
Durham, N. C.
Durham, N. C.
Durham, N. C.
Chapel Hill, N. C.
Semora, N. C.
Durham, N. C.
Durham, N. C.
Durham, N. C.
Durham, N. C.
Smiths Grove, Ky.
Durham, N. C.
Durham, N. C.
Durham, N. C.

Pearce, Lucille Dowell
Pendergrass, Berlena
Phillips, Katherine Manning
Reade, Ethel Gertrude
Satterfield, Annie Lou
Shaw, Louise Carlton
Sneed, Marion
Tillett, Lucy
Toms, Mrs. Annie Cobb
Ward, Evie Morton
Warren, Marion
Whitaker, Bessie

Durham, N. C.
Durham, N. C.
Durham, N. C.
Durham, N. C.
Durham, N. C.
Durham, N. C.
Durham, N. C.
Timberlake, N. C.
Durham, N. C.
Durham, N. C.
Durham, N. C.
Durham, N. C.

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[^0]:    *The clinical instruction will be repeated each quarter in order to utilize all the clinical material and to have small groups of students. Consequently, students may vary the order of the seventh, eighth and ninth quarters; and also the order of the tenth, eleventh and twelfth quarters. The dates listed for the seventh to twelfth quarters are for the use of students admitted to the third year class on October 1, 1930. For other students, the seventh quarter usually will be in the spring, the eighth in the summer etc., although this order is not necessary.

[^1]:    * The clinical instruction will be repeated each quarter in order to utilize all the clinical material and to have small groups of students. Consequently, students may vary the order of the seventh, eighth and ninth quarters; and also the order of the tenth, eleventh and twelfth quarters.

[^2]:    * During 1930 and 1931, medical students will have rooms and meals in the Duke Hospital but thereafter they will live in the dormitories and eat at the Union on the campus. All rooms are provided with furniture, heat, water, electric light and care of rooms; each student furnishes his own blankets, sheets, pillow-slips, towels and pillows.
    ${ }^{* *}$ Medical students, after their third quarter, are eligible for loans from the Angier B. Duke Memorial and other loan funds.

[^3]:    *N. B.-Students who register late are marked absent for all classes held prior to their registration. Late registration very seriously affects credits that may be obtained.

[^4]:    * No undergraduate student who has failed to make superior average in his last preceding work in the University can obtain permission to take excess work: and no student liable to suspension from the University under its rules regarding failure is permitted to enroll in summer school.

[^5]:    $\dagger$ For explanation of $I, I I, C^{*}, G$, see "Explanations and Abbreviations" on preceding page.

[^6]:    * All courses carry two semester-hours of college credit unless otherwise indicated.

[^7]:    $\dagger$ Absent on leave first semester, 1929-30.
    $\ddagger$ Absent on leave second semester, 1929-30.

[^8]:    * Absent on leave, 1929-30.
    $\ddagger$ Absent on leave second semester, 1929-30.

[^9]:    * Absent on leave, 1929-30.
    $\dagger$ Absent on leave first semester, 1929-30.

[^10]:    - Absent on leave, 1929-30.

[^11]:    * Student may substitute here chemistry or physics if he is not electing biology.
    $\dagger$ Unless an elective in the junior year has completed the required work in the departments of philosophy and psychology.

[^12]:    *Within the restrictions of the general requirements of this group, the student may here choose: a foreign language course; or, biology, or chemistry, or physics; or, drawing and surveying.

    If the student prefers, he may postpone this restricted elective until the sophomore year.
    † In case the student has already satisfied the general requirements of the group with regard to sciences and foreign languages, he may here substitute an elective.

[^13]:    * For information concerning admission of women undergraduates to these courses, see p. 128 f.
    * Absent on leave, 1929-30
    $\ddagger$ Absent on leave, 1930-31

[^14]:    111. Mycology.-Structure and classification of fungi. Laboratory and lectures. 3 s.h.

    Mr. Wolf
    Prerequisites, Botany 1 and 2.
    112. Diseases of Plants.-Special reference to crop plants. Laboratory and lectures. 3 s.h.

    Mr. Wolf
    Prerequisites, Botany 1 and 52.
    151. Plant Physiology.-Laboratory and lectures. 4 s.h. Prerequisite, Botany 1.

    Mr. Avery
    [Not offered in 1930-31]

[^15]:    * Absent on leave, 1929-30.

[^16]:    - Absent on leave, 1929-30.

[^17]:    117. Methods of Teaching and Presentation of Subject-Matter in the Grammar Grades.-A study of materials and methods in the grammar grade subjects other than language, reading, and arithmetic. A minimum of fifteen laboratory periods of observation and practice-teaching. Second semester. 3 s.h. Associate Professor Carr and Miss Southerland
[^18]:    * Absent on leave, 1929-1930.

[^19]:    * During Dr. Johnson's absence in the first semester of $1929-1930$ courses 1 and 3 were conducted by Mr. C. C. Jernigan.

[^20]:    $\ddagger$ Absent on leave, 1930-31.

    * Absent on leave, 1929-30.

[^21]:    - This course carries graduate credit only for students whose major subject is education.

[^22]:    $\ddagger$ See statement concerning room charges in the Woman's College, p. 128.
    $\dagger$ Any surplus remaining in this fund at the end of a year is applied to some student activity.

[^23]:    - All work in the Graduate School will be given on the west campus.

[^24]:    * For requirements for admission, see p. 27 ff .
    $\dagger$ For general regulations concerning conduct, see p. 102 ff .

[^25]:    - For requirements in Physical Education, see pp. 100-101.
    $\dagger$ See page 110.
    $\$$ For details, see pp. 111-113.
    ** Room and board are payable quarterly, the first payment being due at the time of matriculation. The other installments are due on December first, February first, and April first respectively.

[^26]:    $\dagger$ Any surplus remaining in this fund at the end of a year is applied to some student activity.

[^27]:    PUBLISHED BY DUKE UNIVERSITY
    IN JANUARY, FEBRUARY, MARCH, APRIL, MAY, JUNE, AND OCTOBER
    ENTERED AS SECOND CLASS MATTER MARCH 25, 1929, AT THE POST OFFICE AT DURHAM, N. C., UNDER ACT OF AUGUST 24, I912

[^28]:    * Six semester-hours in an approved school of similar standing will be accepted as resident work.

[^29]:    * The degree of Bachelor of Arts will be conferred in June, 1930.

[^30]:    * The degree of Bachelor of Arts will be conferred in June, 1930.

[^31]:    * The degree of Bachelor of Arts will be conferred in June, 1930.

[^32]:    * Absent on leave, 1929-1930.
    $\dagger$ For the second semester, 1929-1930.
    $\ddagger$ For the first semester, 1929-1930.

[^33]:    * Absent on leave second semester, 1929-1930.
    $\dagger$ Absent on leave first semester, 1929-30.
    $\ddagger$ Absent on leave, 1929-30.

[^34]:    * Absent on leave, 1929-30.
    $\dagger$ Absent o: leave first semester, 1929-30.

[^35]:    * Absent on leave, 1929-30.

[^36]:    $\dagger$ Second semester, 1929-30.
    $\ddagger$ First semester, 1929-30. Professor of Zoölogy beginning September 1, 1930.

    * Tenure begins September 1, 1930.

[^37]:    * For first semester, 1929-30.
    $\dagger$ For second semester, 1929-30.

[^38]:    * This course carries graduate credit only for students whose major subject is education.

[^39]:    * Candidates for the degree of Master of Arts in the School of Religion must comply with the special requirements printed on page 25 of this catalogue.

[^40]:    * The reservation fee of $\$ 5.00$, payable on or before August 1, is deducted from the rent for the first semester.
    $\dagger$ Any surplus remaining in this fund at the end of a year is applied to some student activity.

[^41]:    * Degree conferred in absentia.

[^42]:    * A.B. to be conferred Juñe, 1930.

[^43]:    $\dagger$ Junaluska Summer S'chool.

[^44]:    *A.B. to be conferred June, 1930.

[^45]:    $\dagger$ Junaluska Summer School.

[^46]:    * A.B. to be conferred June, 1930.
    $\dagger$ Junaluska Summer School.

[^47]:    * A.B. to be conferred June, 1930.

[^48]:    * A.B. to be conferred June, 1930.

[^49]:    * A.B. to be conferred June, 1930.

[^50]:    $\dagger$ Junaluska Summer School.

[^51]:    $\dagger$ Junaluska Summer Schcol.

[^52]:    $\dagger$ Absent on leave first semester, 1929-30.
    $\ddagger$ Absent on leave second semester, 1929-30.

[^53]:    Absent on leave, 1929-30.
    $\ddagger$ Absent on leave second semester, 1929-30.

[^54]:    * Absent on leave, 1929-30.
    $\dagger$ Absent on leave first semester, 1929-30.

[^55]:    * Absent on leave, 1929-30.

[^56]:    * Second semester, 1929-30.
    ** First semester, 1929-30. Professor of Zoölogy beginning September 1, 1930.

[^57]:    ${ }^{*}$ T Term begins September 1, 1931.
    ** Both semesters 1930-31.

[^58]:    * Absent on leave, 1929-30.

[^59]:    *Term begins 1930-31.

[^60]:    *Term begins 1930-31.
    $\dagger$ For second semester, 1929.30.

[^61]:    *For first semester, 1929-30.

[^62]:    * Student may substitute here chemistry or physics if he is not electing biology.
    $\dagger$ Unless an elective in the junior year has completed the required work in the departments of philosophy and psychology.

[^63]:    * Within the restrictions of the general requirements of this group, the student may here choose: a foreign language course; or, biology, or chemistry, or physics; or, drawing and surveying.

    If the student prefers, he may postpone this restricted elective until the sophomore year.
    $\dagger$ In case the student has already satisfied the general requirements of the group with regard to sciences and foreign languages, he may here substitute an elective.

[^64]:    $\dagger$ Absent on leave, 1929-30.
    $\ddagger$ Absent on leave, 1930-31.

[^65]:    * Absent on leave, 1929-30.

[^66]:    * Absent on leave, 1929-30.

[^67]:    * Absent on leave, 1929-1930.

[^68]:    * During Dr. Johnson's absence in the first semester of 1929.1930 courses 1 and 3 were conducted by Mr. C. C. Jernigan.

[^69]:    $\dagger$ Absent on leave, 1930-31.

    * Absent on leave, 1929-30.

[^70]:    * This course carries graduate credit only for students whose major subject is education.

[^71]:    * This course carries graduate credit only for students whose major subject is education.

[^72]:    * Candidates for the degree of Master of Arts in the School of Religion must comply with the special requirements printed on page 25 of this catalogue.

[^73]:    * Six semester-hours in an approved school of similar standing will be accepted as resident work.

[^74]:    "I recommend that great care and discrimination be exercised in admitting as students only those whose previous record shows a character, determination and application evincing a wholesome and real ambition for life."-JAMES B. DUKE.

[^75]:    *The clinical instruction will be repeated each quarter in order to utilize all the clinical material and to have small groups of students. Consequently, students may vary the order of the seventh, eighth and ninth quarters; and also the order of the tenth, eleventh and twelfth quarters. The dates listed for the seventh to twelfth quarters are for the use of students admitted to the third year class on October 1, 1930. For other students, the seventh quarter usually will be in the spring, the eighth in the summer etc., although this order is not necessary.

[^76]:    *The clinical instruction will be repeated each quarter in order to utilize all the clinical material and to have small groups of students. Consequently, students may vary the order of the seventh, eighth and ninth quarters; and also the order of the tenth, eleventh and twelfth quarters.

[^77]:    * During 1930 and 1931, medical students will have rooms and meals in the Duke Hospital but thereafter they will live in the dormitories and eat at the Union on the campus. All rooms are provided with furniture, heat, water, electric light and care of rooms; each student furnishes his own blankets, sheets, pillow-slips, towels and pillows.
    ** Medical students, after thei1 third quarter, are eligible for loans from the Angier B. Duke Memorial and other loan funds.

[^78]:    WILLIAM KENNETH BOYD, A.B., A.M., Ph.D., Member of the Faculty Committee on the Summer School

    ALICE MARY BALDWIN, A.B., A.M., Ph.D., Dean of Women

    WILLIAM HENRY GLASSON, Ph.B., Ph.D., Dean of the Graduate School of Arts and Sciences

    ARTHUR MARCUS PROCTOR, A.B., A.M., Associate Director of the Summer School

    MARY GRACE WILSON, A.B., Social Director and Acting Dean of Women

    ## FACULTY

    JAMES CANNON, III, (Duke University),
    A.B., Duke; A. M., Princeton; Th.B., Th.M., Princeton Theological

    Seminary; Edinburgh, 1919; Garrett, 1924; Biblical Literature. BENJAMIN GUY CHILDS, (Duke University),
    A.B., A.M., University of Virginia; University of Virginia, 1920-22; Education.

